HD Digital Recorder
Digitaler HD-Rekorder
HD Dijital Kayıt Cihazı

User's Manual
Bedienungsanleitung
Kullanıcı Kılavuzu

iCord HD+

The default password is 0000.
Das voreingestellte Passwort lautet 0000.
Menü parola/PIN 000´dir.

HUMAX

Notice

English

Thank you for purchasing a HUMAX product. Please read this user's manual carefully to be able to safely install, use and maintain the product at maximum performance. Keep this user's manual next to your product for future reference. The information in this user's manual is subject to change without notice.

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Warranty

The warranty does not cover parts which may become defective due to misuse of the information contained in this manual.

Meaning of Symbols

To reduce the risk of electric shock, do not remove cover (or back). No user serviceable parts inside. Refer servicing to qualified service personnel.

This symbol indicates dangerous voltage inside the product that presents a risk of electric shock or personal injury.

This symbol indicates important instructions accompanying the product.

Warnings, Cautions and Notes

Throughout the whole manual, pay special attention to the following marks that indicate hazardous situations.

Warning
Indicates a hazardous situation which could result in serious injury.

Caution
Indicates a situation which could damage the equipment or other apparatus.

Note
Indicates additional information to make the user aware of possible problems and information of any importance to help understand, use and maintain the installation.

Notice

'WEEE' Instructions

This product should not be disposed with other household wastes at the end of its working life. Please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. This will prevent possible harm to the environment or human health from uncontrolled waste disposal.

Domestic users:
Please contact either the retailer where you purchased this product or their local government office for details of where and how they can take this item for environmentally safe recycling.

Business users:
Contact your supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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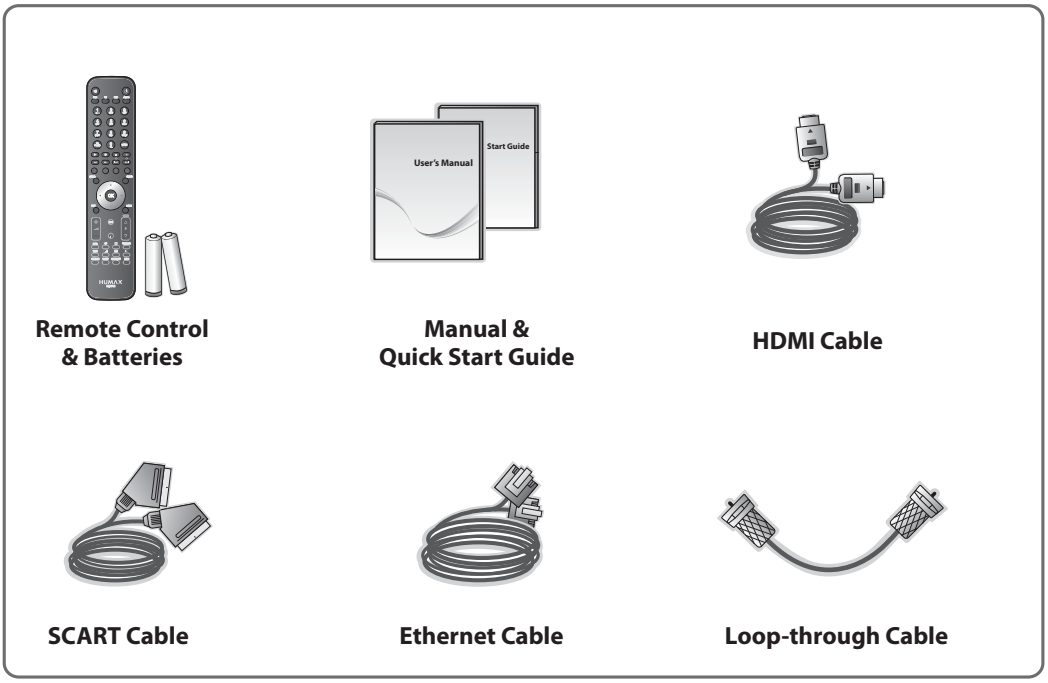
Quick Start Guide

1. Checking Accessories

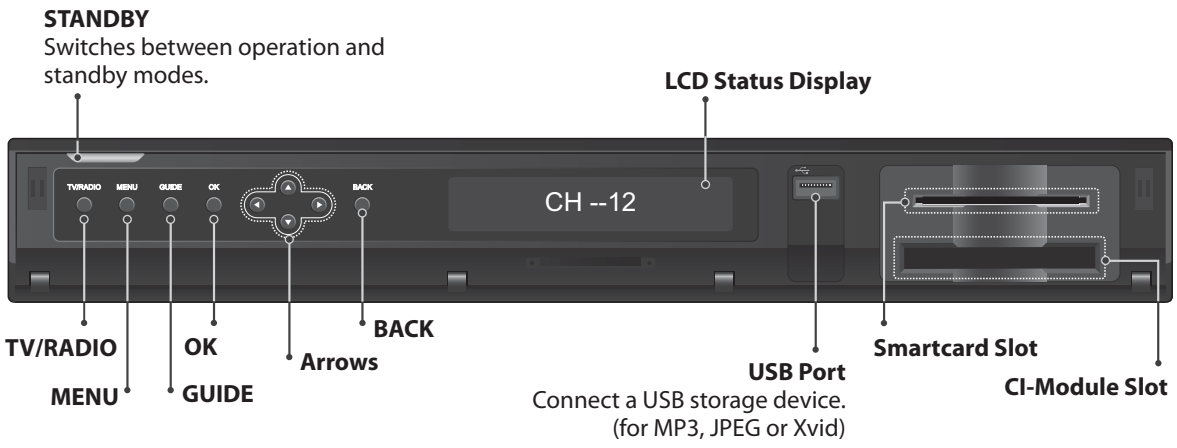


Note: The accessories may vary according to area.

2. Product Overview

Front Panel

Note: The image shown may differ from the actual product.



Quick Start Guide

Rear Panel

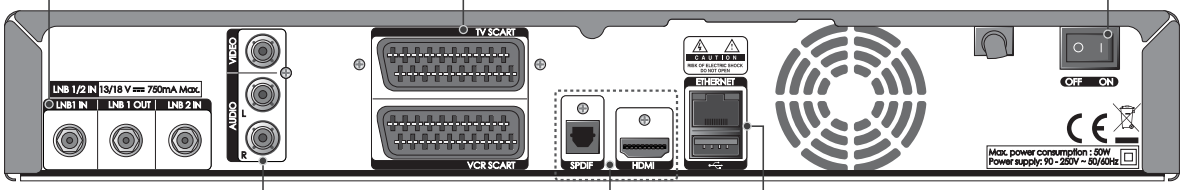
LNB 1 IN, LNB 2 IN
Connect a satellite antenna cable.
Up to two cables can be connected.

LNB 1 OUT
Connect loop through

TV SCART
Connect to the TV using a TV SCART cable.

VCR SCART
Connect to the VCR or DVD using a VCR SCART cable.

ON/OFF
Powers on/off.



VIDEO
Connect to the TV or VCR using an RCA cable.

AUDIO
Connect to the TV or VCR using an RCA cable.

SPDIF
Connect to the audio system using an S/PDIF cable. (digital audio)

HDMI
Connect to the TV using an HDMI cable.

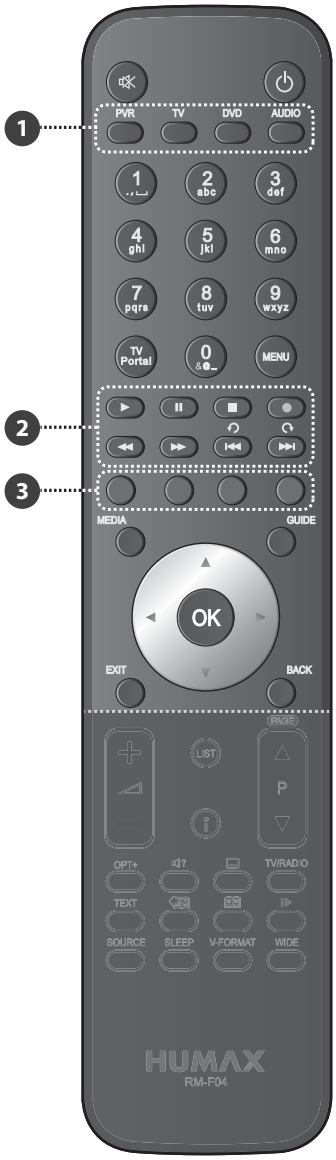
ETHERNET
Service port

USB Port
Connect a USB storage device. (for MP3, JPEG or Xvid)

Note: The image shown may differ from the actual product.

Quick Start Guide

Remote Control



	MUTE	Mutes audio
	STANDBY	Switches between operation and standby modes.
❶	**MODE**	Changes the mode of remote.
	NUMERIC	**(0-9)**
	TV Portal	Enters HUMAX TV Portal
	MENU	Displays the main menu.
❷	**Playback Control Buttons**	▶ Play, **II** Pause, ■ Stop, ● Record, ◀◀ Rewind, ▶▶ Fast Forward, ⏮ Previous, ⏭ Next, ↺ Instant Replay, ↻ Skip
❸	**COLOUR Buttons**	Colour keys for interactive applications.
	MEDIA	Displays the media list.
	GUIDE	Displays the programme guide.
	ARROW Buttons	Moves the cursor up, down, left or right.
	OK	Selects a menu or confirms.
	EXIT	Exits all On-Screen Display (OSD) screens.
	BACK	Returns to the previous channel.

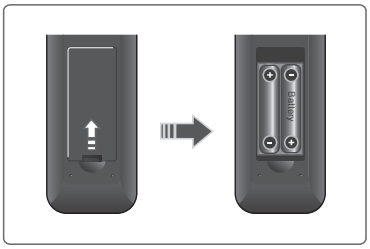
Note: The image shown may differ from the actual product.

Quick Start Guide

VOLUME	Adjusts the audio volume.
P+/P-	Changes the channel or page.
LIST	Displays the channel list.
i (Information)	Displays the channel and programme information.
OPT+	Displays the channels attributes.
AUDIO	Displays the audio list.
SUBTITLE	Displays the subtitle language list.
TV/RADIO	Switches between TV and radio modes.
TEXT	Enters the digital text service.
SOURCE	Controls the output of TV SCART.
SLEEP	Sets the sleep timer.
V-FORMAT	Sets the resolution of video.
WIDE	Sets the display format.
❹ **Playback Control Buttons**	Add Bookmark, Bookmark List, ▮▶ Slow

Inserting Batteries

1. Press the hook upward and lift the battery cover off.
2. Insert the batteries (supplied) matching the plus(+) and minus(-) at each end.
3. Close the cover.

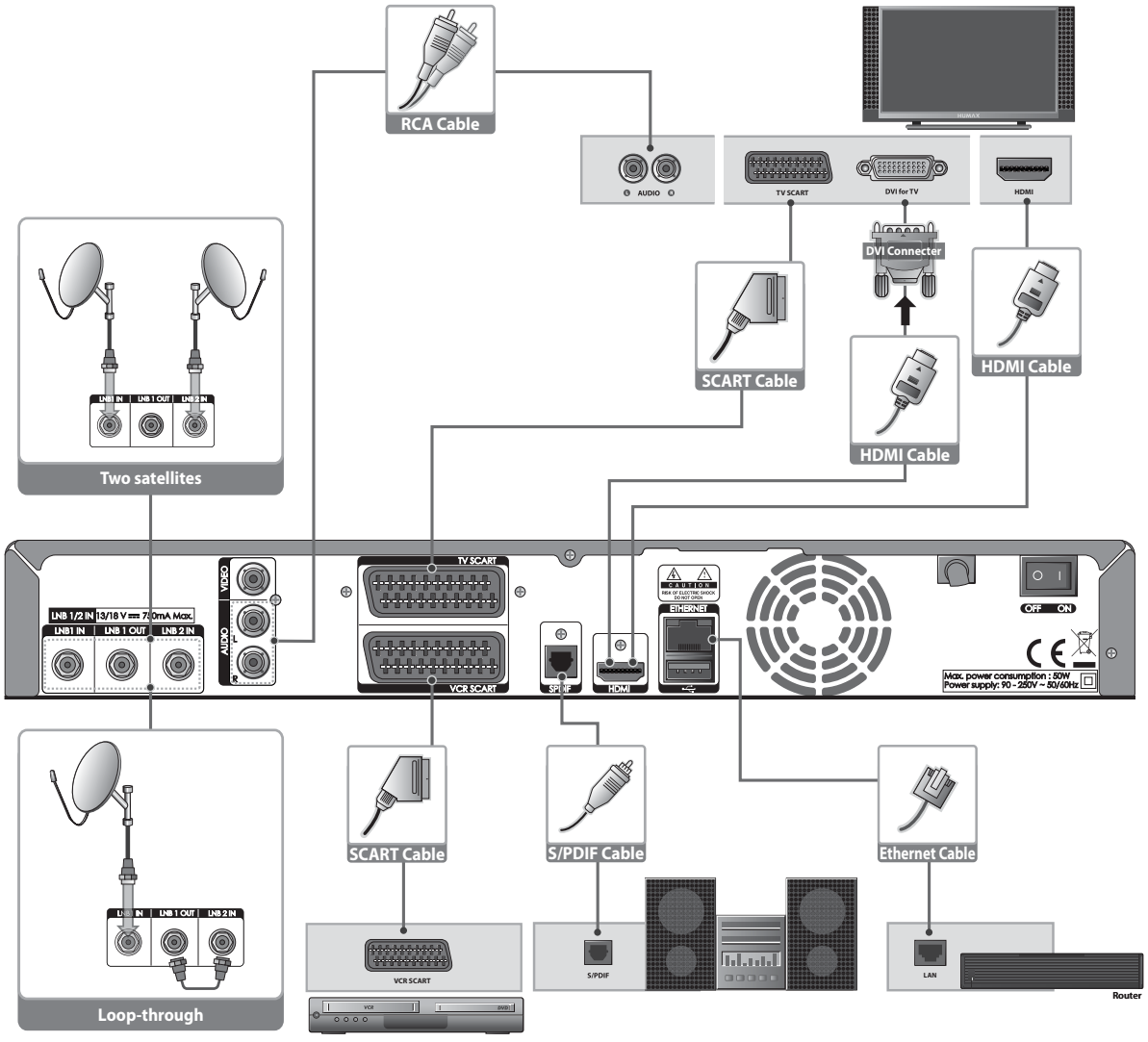


Quick Start Guide

3. Connections

This section describes how to connect your product to match your particular devices setup and to gain optimum signal quality. The product provides various interfaces to connect to the TV, VCR or other devices. Select the most appropriate procedure depending on the device you have.

Note: If you encounter any problems setting up your product, please contact your local retailer or Humax Customer Helpline.



Quick Start Guide

Connecting the Antenna

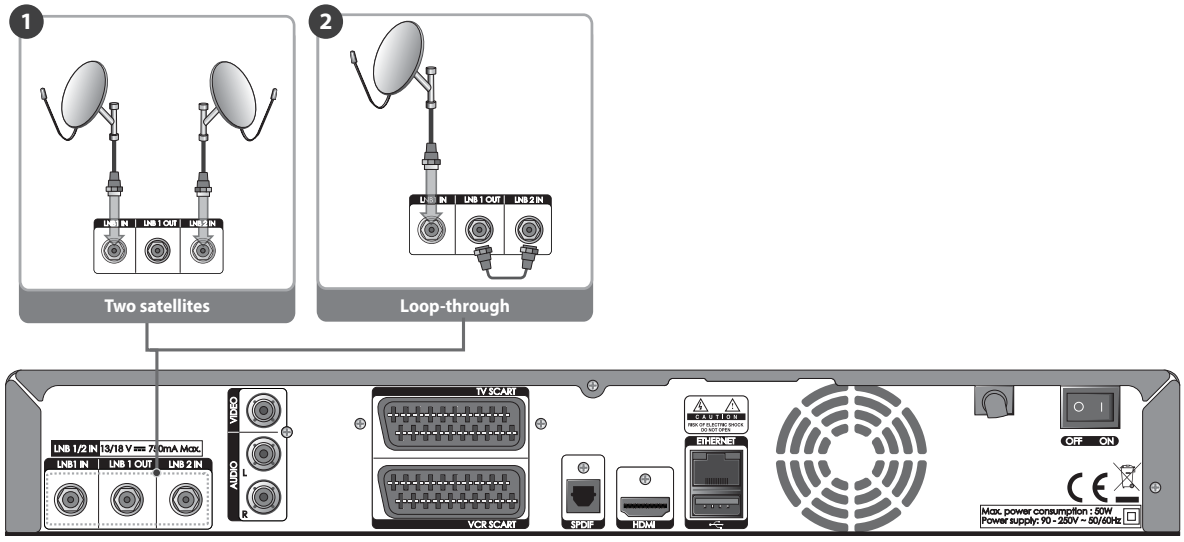
❶ Connecting to Two Satellites;

Connect the two RF cables from your satellite dish to the LNB 1 IN and LNB 2 IN connectors.

Note: This connection will allow you to view different channels while recording or record two channels at the same time.

❷ Connecting to Single Satellite;

1. Connect an RF cable from your satellite dish to LNB 1 IN connector.
2. Connect the LNB 1 OUT and LNB 2 IN connectors using a loop through RF cable.



Note:

- When using this connection, the specified functions for 2 tuners will be not available.
- When using a Motorised System or SCD Antenna (also known as Unicable), connect the RF cable only to LNB 1 IN connector.

Quick Start Guide

Connecting the TV

❶ TV with the HDMI connector;

For the best picture quality, connect the product and TV using an HDMI cable.

❷ TV with the DVI connector;

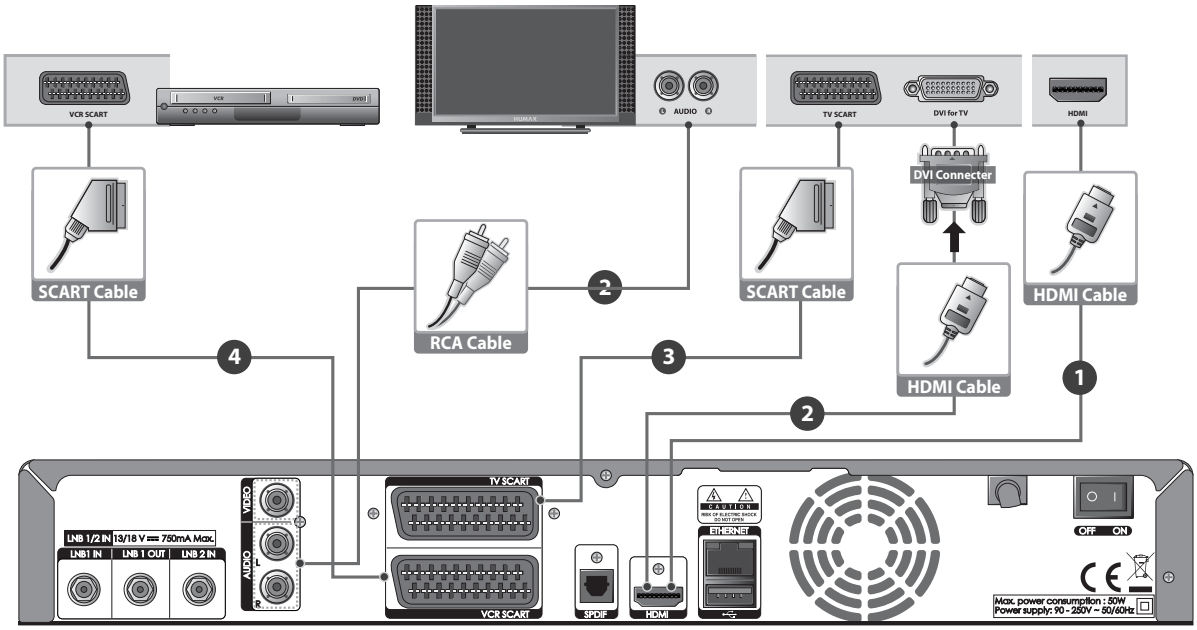
For very good picture quality, connect the product and TV using an HDMI cable and an HDMI-to-DVI converter for video and an RCA cable (Audio L/R) for audio.

❸ TV with the SCART connector;

For good picture quality, connect the product and TV using a SCART cable.

❹ VCR with the SCART connector;

To output video and audio, connect the product and VCR using a SCART cable.



Note:

- When using the digital audio system, connect the product and the digital audio system using an S/PDIF cable for audio.
- Programmes restricted by DRM (Digital Rights Management) may not be viewed via the HDMI cable. Connect using the SCART or composite cable.
- Connecting your TV directly to the audio/video output of the product will assure a more vivid picture and enhance your viewing enjoyment.

Quick Start Guide

Connecting the Network

❶ Connecting to the LAN;

Connect one end of the Ethernet cable to the recorder and the other end to the LAN router.

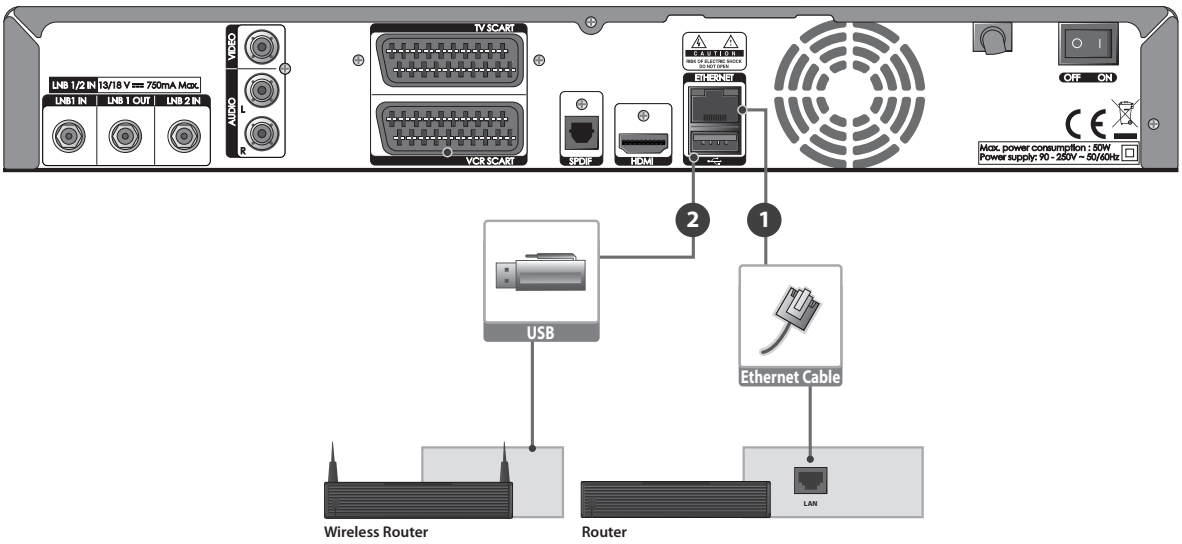
❷ Connecting to the Wi-Fi (Wireless LAN);

You can connect the network via the Wi-Fi access point or DSL/cable modem.

1. Plug in the wireless USB dongle to the USB port.
2. Set the options for the Wi-Fi.
   - ➤ **Network Name (SSID)**: Select the network name of your Wi-Fi access point from the list.
   - ➤ **Security Type (WEP)**: This product supports WEP 40/128bit ASCII and WEP 40/128bit HEX. The security type of the Wi-Fi and the receiver shall be set the same.
   - ➤ **Password**: When using the security type, you must set the password. Enter the same password in the Wi-Fi setting menu.
3. After completing the Wi-Fi access point setting, make sure the settings in **Installation Wizard** or **System>Network>Configure Wi-Fi** are the same.

Note:

- Make sure the distance between the Wi-Fi access point and the receiver is not too far away. This may lower the quality of service.
- It is recommended to purchase a wireless USB dongle distributed by HUMAX. Other products may not function or respond.



❸ Using HUMAX Powerline AV Adaptor;

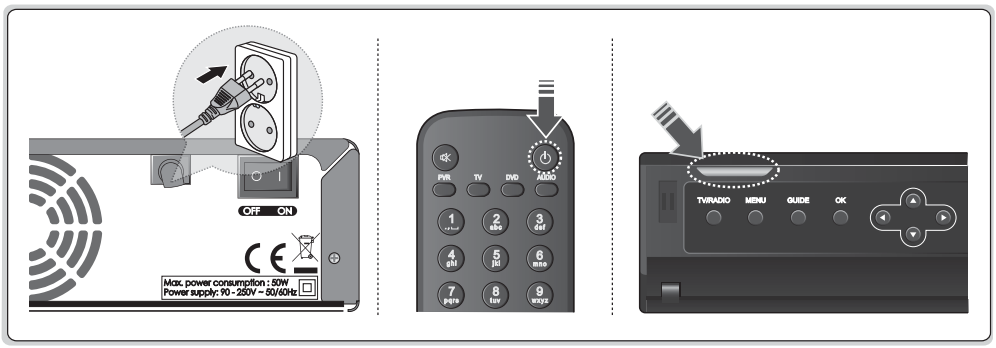
You can connect to the network using the HUMAX Powerline AV Adaptor. Connect one end of the Ethernet cable to the recorder and the other end to the adaptor. Plug the HUMAX Powerline AV Adaptor to a wall outlet. (Separate purchase required)

Note: HUMAX recommends the network connection over a direct LAN or the HUMAX powerline AV adaptor.

Quick Start Guide

4. Powering On

1. Connect the power cord of the product to a wall outlet.
2. Ensure the ON/OFF switch at the rear of the product is switched to ON.
3. Power on by pressing the **STANDBY** button on the remote control or the **STANDBY** button at the front of the product.



5. Installation Wizard

When powering on your product for the first time after purchase or performing the factory default in menu, the installation wizard will operate automatically.

Note: If you exit the installation wizard without fully completing the channel searching procedure, you may not have all of the channels available. In this case, you can use the **Settings > Installation** menu to search for more channels.

1. **Language**
   Select your language.

2. **Display**
   Set the video output to your TV.

3. **Time Zone**
   Select your country to determine your time zone.

Quick Start Guide

4. Search Channels
Select the type of channel search.

- **Quick Search:** Default channels of ASTRA1 (19.2E) will be applied without searching channels.
- **Automatic Search:** Search all channels of ASTRA1 (19.2E) and HOT BIRD (13.0E) automatically.
- **Skip:** If you have SCD or motor antenna, skip the search process and go to **Installation** in **Settings**.

Note: **Quick Search** appears only in Germany or Austria.

5. Automatic Search
Channel search will begin automatically. Save the found channels when the search is complete.

6. Ethernet Setting
Make sure that the LAN cable is connected to the Ethernet port or the wireless USB adaptor is enabled. Configure the network setting.

6
Configure Network
To use various Internet applications, make sure that the LAN cable is connected to the Ethernet port or the wireless USB adaptor is enabled.
LAN
Back
Next

7. Result
The result of the Installation Wizard is shown. Select **Finish** to exit the wizard.

6. Menu Overview

	Channel List
	TV Guide
	Video
	Music
	Photo
	HUMAX TV Portal
	Settings

Preference
- Parental Control
- Language
- Time
- Video
- Audio
- Recording
- Screen Display

Edit Channels
- Edit Preferred List
- Edit Channel List
- Edit Favourite List
- Import/Export Channels

Installation
- Search Channels
- Update LCN Channels
- Software Update
- Factory Default

System
- System Information
- Signal Detection
- Power Management
- TVTV EPG
- Common Interface
- Smartcard Information
- Data Storage
- Network

How to Navigate

MENU — Displays the Menu OSD

OK or — Selects (Enters) a menu or confirms a selection

BACK — Goes back to the previous screen

EXIT — Exit all On-Screen

Moves among menus or options

Changes or adjusts the option

Enters the number (0~9)

Basic Operation

Changing Channels

You can change the channels in several ways.

- ❖ Press the **P▲/P▼** button.
- ❖ Enter the channel number directly. **(0-9)**
- ❖ Go to the channel list or TV guide and select a channel.

Note:

- Press the **TV/RADIO** button to switch between TV and radio channels.
- Press the **BACK** button to return to the previous channel.

Volume / Mute / Audio

- ❖ To adjust the audio volume, press the **◢+/◢-** button.
- ❖ To mute the audio temporarily, press the **MUTE** button.

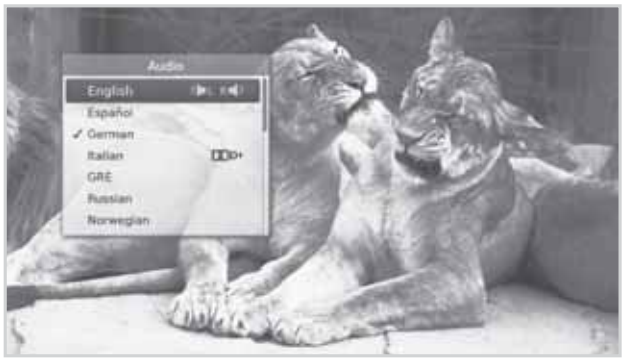
Setting Audio Options

Audio options are available only when the programme supports multiple audio languages.

1. Press the **AUDIO** button.
2. Select the audio language.
3. Select the audio direction.
4. Press the **OK** button.

Note:

- The mute function remains set while you change channels.
- You cannot set the audio direction when the programme is broadcast in Dolby Digital.



Basic Operation

Display Format / Resolution

Setting Display Format

Press the **WIDE** button to set the display format according to the screen ratio.
Each time you press this button, the value changes.

- Screen ratio 4:3: **Auto – Letterbox – Centre**
- Screen ratio 16:9: **Auto – Pillar Box – Zoom**

Note: Refer to ***Display Format*** for details.

WIDE Display

Setting Resolution

Press the **V-FORMAT** button to set the resolution of the screen.
Each time you press this button, the value changes.

- **576i - 576p - 720p - 1080i - Original**

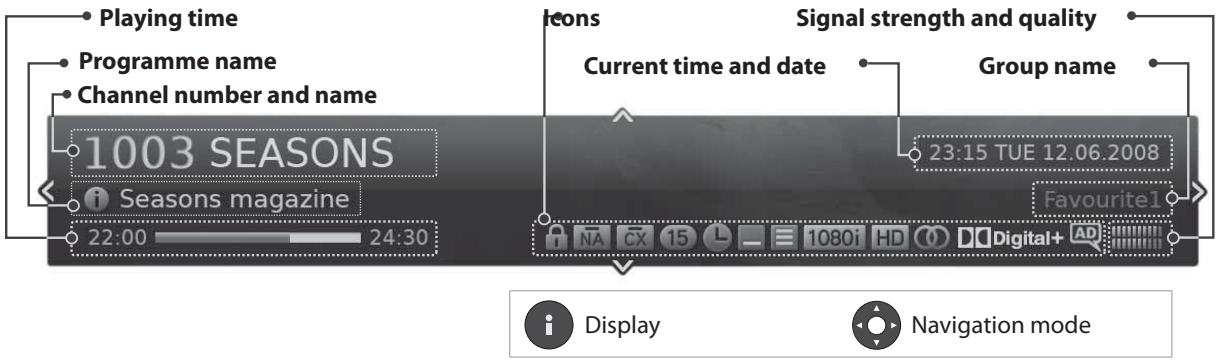
Note: When connected with an HDMI cable, you can only change to resolutions the TV supports.

V-FORMAT Display

Basic Operation

Programme Information (i-plate)

The i-plate is an information banner that is displayed for a certain period of time whenever you change channels. Press the **i** button while watching a progamme to display the i-plate. Press the **EXIT** button to hide.



- **Viewing detailed programme information**
  Press the i button again while the i-plate is displayed.
- **Viewing previous/next programme information**
  Press the ◀/▶ button while the i-plate is displayed. Press the **OK** button to set reminders or recordings for future programmes.
- **Viewing programme information of other channels**
  Press the ▲/▼ button while the i-plate is displayed. Press the **OK** button to change to the selected channel.

Icons

The icons represent the information and services provided.

	Locked programme		Teletext
	Scrambled programme (CAS icons)	1080i	Resolution
13	Parental level (minimum age for viewing)	HD	HD programme
	Scheduled programme (Red: Record, Blue: Reminder)		Multiaudio
	Subtitle	DD DD+	Dolby Digital audio Dolby Digital Plus audio

Note: Programme information is not displayed when there is no programme information.

Basic Operation

Sleep Timer

Press the **SLEEP** button to set the automatic turn off time.
Each time you press this button, the value changes.

- **10 - 20 - 30 - 60 - 90 - 120 minutes**

SLEEP Display

Subtitle

You can select the subtitle language when subtitle information is provided.

1. Press the **SUBTITLE** button.
2. Select the subtitle language.
3. Select **Off** to make the subtitle disappear.
4. Press the **OK** button.

Note: You can choose to always display the subtitle when available.

Display Select OK Confirm

Teletext

Teletext is a free service broadcast which gives the latest information on news, weather and many other topics. You can use interactive services in teletext mode.

All teletext supporting channels have the teletext icon on the i-plate.

1. Press the **TEXT** button.
2. To display the teletext menu, press the **MENU** button in teletext mode.
3. Select the teletext function you want and press the **OK** button.

TEXT Display MENU Teletext menu Select

OK Confirm

Channel List

The channel list will help you find the channel you want to watch quickly and easily.

You can access the channel list in several ways.

- ❖ Press the **LIST** button.
- ❖ Press the **MENU** button and select **Channel List**.

Changing Channels

Select the channel you want to watch and press the **OK** button. The displayed channel will change.

Note:
- 🔒: Locked channel, ▬ : Scrambled channel (CAS icons)
- Press the **i** button to view the detailed programme information.
- Press the **LIST** or **EXIT** button to exit.

Advanced Options

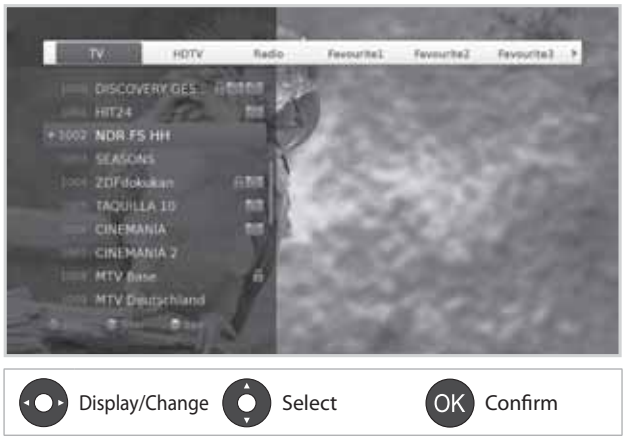
Changing Group

You can display the list of the selected channel group.

➤ **TV, HDTV, Radio, Favourite 1~5, Recent**

1. Press the ▶ button.
2. Select a channel group.
3. Press the **OK** button.

Note: Press the **TV/RADIO** button to switch between TV and Radio groups.



Sorting Channels

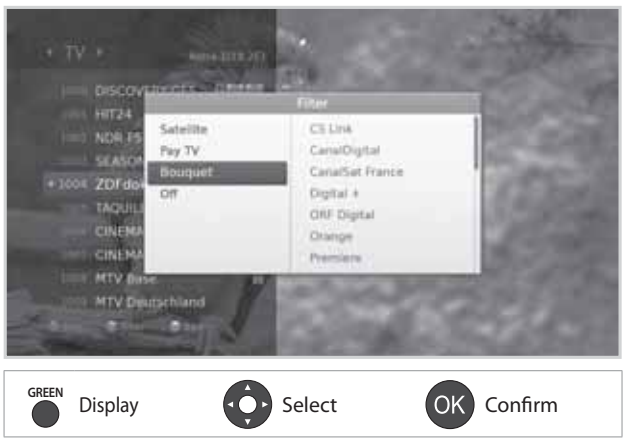
Press the **RED** button to sort the list in numerical or alphabetical order.

Filtering Channels

You can filter the channels according to channel type in TV or Radio list.

1. Press the **GREEN** button.
2. Select the channel type.
   ➤ **Satellite, Pay TV, Bouquet, Off**
3. Press the **OK** button.

Note: Select **Off** to cancel filtering.



Channel List

Editing Channels in Channel List

You can lock, delete or rename each channel in the channel list, as well as in menu. To edit the multiple channels, go to the **Settings > Edit Channels** menu.

Locking / Deleting / Renaming Channels

1. Select a channel you want to edit and press the **YELLOW** button.
2. Select an option.
   - ➤ **Lock**: Select **On** or **Off**.
   - ➤ **Delete**: Press the **OK** button.
   - ➤ **Rename**: Press the **OK** button and enter the name in the keyboard.
3. Select **OK** to save and exit.

Note:
- Refer to ***Edit Channels*** for details
- The default password is 0000. If you have forgotten the password, please contact your local TV distributor.

Setting Favourite Channels

You can select your favourite channels and include them in the five favourite groups.

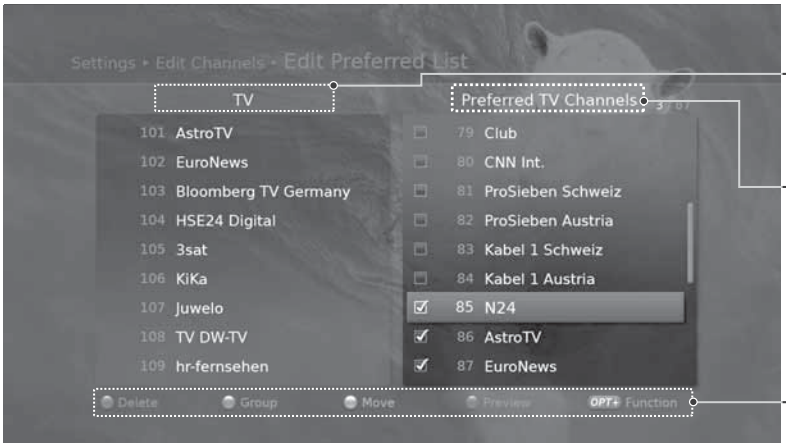
1. Select a channel and press the **YELLOW** button.
2. Select **Favourite**.
3. Select a favourite group you want to include the channel in and press the **OK** button.
   To remove a channel from a favourite group, select the group and press the **OK** button again.
4. Select **OK** to save and exit.

Channel List

Edit Preferred List

The **Edit Preferred List** menu will help you manage the channels 1~99 in the preferred list.

MENU → Settings → Edit Channels → Edit Preferred List



Group name

Preferred TV channels

Function buttons
: Coloured or **OPT+** button

Note: Press the **MENU** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

Adding/Removing Preferred Channels

1. To add channels to the preferred list, select the channels you want to add using the ▲/▼ and **OK** button in the left column and then press the **RED** button. The added channels will appear in the right column.
2. To remove channels from the preferred list, select the channels you want to remove in the right column and then press the **RED** button.

Moving Channels

1. Select the channels using the ▲/▼ and **OK** button.
2. Press the **YELLOW** button.
3. Move the selected channels to the location you want using the ▲/▼ and **OK** button.

Note: You can move the channels in the right column only.

Channel List

Advanced Options

Changing Group

To switch between TV and Radio groups, press the **GREEN** button.

Changing Background

You can change the channel displayed in the background while editing.

1. Select the channel you want to watch.
2. Press the **BLUE** button. The displayed channel will change.

Selecting/Releasing All Channels

1. Press the **OPT+** button.
2. Select **Select All**.
3. To release all, select **Release All**.

Managing Channels

Editing Channels

The **Edit Channel List** menu will help you delete, move lock or rename multiple channels.

MENU → Settings → Edit Channels → Edit Channel List

Note:

- : Locked channel, : Scrambled channel (CAS icons)
- Press the **MENU** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

Deleting Channels

1. Select the channels using the ▲/▼ and **OK** button.
2. Press the **RED** button.

Moving Channels

1. Select the channels using the ▲/▼ and **OK** button.
2. Press the **GREEN** button.
3. Move the selected channels to the location you want using the ▲/▼ and **OK** button.

Managing Channels

Locking / Unlocking Channels

1. Select the channels using the ▲/▼ and **OK** button.
2. Press the **OPT+** button.
3. Select **Lock**. To unlock, select **Unlock**.

Renaming Channels

1. Select a channel to rename.
2. Press the **OPT+** button.
3. Select **Rename**.
4. Enter the name in the keyboard.

Advanced Options

Changing Group

To list the channels of other groups, press the **YELLOW** button and select a group you want.

Note: Press the **TV/RADIO** button to switch between TV and Radio groups.

Changing Background

You can change the channel displayed in the background while editing.
1. Select the channel you want to watch.
2. Press the **BLUE** button. The displayed channel will change.

Selecting / Releasing All Channels

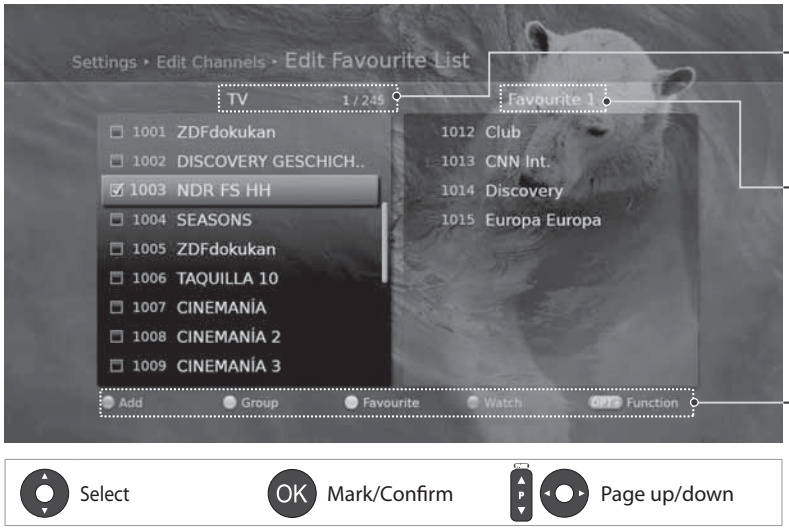
1. Press the **OPT+** button.
2. Select **Select All**.
3. To release all, select **Release All**.

Managing Channels

Editing Favourite Channels

The **Edit Favourite List** menu will help you add or remove channels from the favourite groups.

MENU → Settings → Edit Channels → Edit Favourite List



Note: Press the **MENU** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

Adding / Removing Favourite Channels

1. Press the **YELLOW** button and select the favourite group you want to edit.
2. To add channels to the favourite list, select the channels you want to add using the ▲/▼ and **OK** button in the left column and then press the **RED** button. The added channels will appear in the right column.
3. To remove channels from the favourite list, select the channels you want to remove in the right column and then press the **RED** button.

Moving Channels

1. Select the channels using the ▲/▼ and **OK** button.
2. Press the **GREEN** button.
3. Move the selected channels to the location you want using the ▲/▼ and **OK** button.

Note: You can move the channels in the right column only.

Managing Channels

Renaming Favourite Groups

1. Press the **YELLOW** button and select the favourite group you want edit.
2. Press the **OPT+** button.
3. Select **Rename**.
4. Enter the name in the keyboard.

Advanced Options

Changing Group

To list the channels of other groups in the left column, press the **GREEN** button and select a group you want.

Note: Press the **TV/RADIO** button to switch between TV and Radio groups.

Changing Background

You can change the channel displayed in the background while editing.

1. Select the channel you want to watch.
2. Press the **BLUE** button. The displayed channel will change.

Selecting / Releasing All Channels

1. Press the **OPT+** button.
2. Select **Select All**.
3. To release all, select **Release All**.

Managing Channels

Importing / Exporting Channels (USB)

The channel data can be imported from the USB to the receiver or exported from the receiver to a USB device (such as USB memory stick). The file format of the channel data is .udf format.

MENU → Settings → Edit Channels → Import / Export Channels

Importing Channels

You can import the channel data from a USB device.

1. Connect the USB device with the channel data into the USB port.
2. Select **Import Channels from USB**.
3. The folders and channel data from the USB device will be displayed in a list.
4. Select the channel data file you want to import.
5. Press the **OK** button.
6. Select **Yes** and press the **OK** button.

Display OK Mark/Confirm Page up/down

Page up/down

Exporting Channels

You can export the channel data to a USB device.

1. Connect the USB device to save the channel data of your receiver into the USB port.
2. Select **Export Channels to USB**.
3. Select **Yes** and press the **OK** button.

TV Guide

The TV guide is an on-screen guide of grid type which displays the programme information of channels in time and date order.

You can access the TV guide in several ways.

- Press the **GUIDE** button.
- Press the **MENU** button and select **TV Guide**.

Note: Press the **GUIDE** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

- Preview
- Current time and date
- **Information of the selected programme:** channel number & name, programme name, simple information, favourite group, network type, and icons
- Time bar
- **Function buttons** : Coloured or **OPT+** button

Select | OK Tune/Reserve | Page up/down

Note:

- Press the **i** button to view the detailed programme information.
- : Scheduled programme (Red: Recording, Blue: Reminder), : Recording programme, : Present time, : DRM(Digital Rights Management) icon

Watching Programmes

1. Select a programme and press the **OK** button. The programme will be displayed in the preview.
2. Press the **OK** button again to exit the TV guide and watch the programme.

TV Guide

Setting Reminders or Recordings

1. Select a future programme and press the **OK** button.
2. Select **Reminder** or **Recording** and press the **OK** button.
3. Press the **OK** button again to cancel the reservation.
   The reserved programmes will be added automatically in **Schedule**.

Note:
- If the programme is overlapped with another programme, adjust the reservation appropriately.
- If the channel is locked, you will be prompted to enter your password before watching.
  The default password is 0000. If you have forgotten your password, please contact your local distributor.
- In standby mode, the TV will turn on when a scheduled reminder starts.
- You can reschedule reminders or recordings. (Refer to ***Scheduling Reminders and Recordings***.)

Advanced Options

Quick Navigation

Press the ◀/▶ button to move to the previous/next page.
Press the ⏪/⏩ button to jump back/ahead two hours.
Press the ⏮/⏭ button to move to the previous/next day.

Changing Group

To list the channels of other groups, press the **OPT+** button and select a group you want.

Note:
- Press the **TV/RADIO** button to switch between TV and Radio groups.
- To search specific programmes, go to **Find Programmes** by pressing the **GREEN** button. (Refer to **Finding Programmes**.)

Finding Programmes

Find Programme will help you find the programmes more specifically using the keyword or genre.

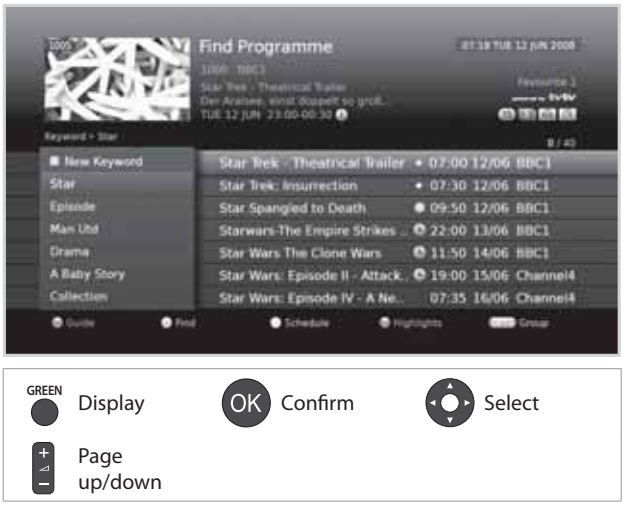
By Keyword

1. Press the **GREEN** button.
2. Select **Keyword** and press the ▶ button.
3. Select a keyword and press the **OK** button.

Note: To enter a new keyword, select **New Keyword**.

By Genre

1. Press the **GREEN** button.
2. Select **Genre** and press the ▶ button.
3. Select a genre and press the **OK** button.
4. Select the specific genre and press the **OK** button. (if provided)


Find Programme
New Keyword
Star
Episode
Man Utd
Drama
A Baby Story
Collection
Star Trek - Theatrical Trailer 07:00 12/06 BBC1
Star Trek: Insurrection 07:30 12/06 BBC1
Star Spangled to Death 09:50 12/06 BBC1
Starwars-The Empire Strikes ... 22:00 13/06 BBC1
Star Wars The Clone Wars 11:50 14/06 BBC1
Star Wars: Episode II - Attack.. 19:00 15/06 Channel4
Star Wars: Episode IV - A Ne.. 07:35 16/06 Channel4

Note:

- Press the **i** button to view the detailed programme information.
- Press the **OK** button to watch a found programme. (Refer to ***Changing Channels***.)
- You can set reminders or recordings for future programmes. (Refer to ***Setting Reminders or Recordings***.)

TV Guide

Scheduling Reminders and Recordings

Schedule lists reminders or recordings and will help you manage them in more detail.

1. Press the **YELLOW** button.
2. You can add, edit or delete your reminders or recordings.
   - ➤ To add, select **New Reservation** and press the **OK** button.
   - ➤ To edit, select a reservation and press the **OK** button.
   - ➤ To delete, select a reservation and press the **OPT+** button.
3. **Reminder** will pop up. You can change the options you want using the ▲/▼/◄/►, **NUMERIC(0~9)** and **OK** buttons.
4. Select **OK** to save and exit.

Schedule
New Reservation
12/06 TUE 23:00–01:00 Hippo Hurra - Die Abenteuer von...
12/06 TUE 09:00–10:25 Die Gruselschule
12/07 WED 05:20–07:00 Hier ist Ian
12/08 THU 09:00–11:25 Seasons magazine
12/09 FRI 20:00–21:22 Grandstand
12/10 SAT 09:00–10:25 BRAVO BERND

Note:

- Press the **i** button to view the detailed programme information.
- You can easily set reminders or recordings in TV guide, Find Programmes or i-plate navigation mode. (Refer to ***Setting Reminders or Recordings, Find Programmes,*** or ***Programme Information***)

Highlights

Highlights display the highlights and detailed programme information of each channel based on the time, date or topic. You can look up programmes up to a week in advance and set reminders or recordings with ease.
This service is available only when TVTV EPG is provided.

1. Press the **BLUE** button.
2. Select a programme and press the **OK** button. You can set a reminder or recording.
3. Press the **OPT+** button to sort the programmes in time or alphabetical order.

Note:

- Press the **i** button to view the detailed programme information.
- You can choose to update the TVTV EPG during standby or select the update time in **Settings > System > TVTV EPG**.

Personal Video Recorder

You can record programmes in the built-in hard disk and view the recorded programmes whenever you want.

Recording

You can record up to two programmes at the same time. Ensure that there is enough free space before recording. If the space on the hard disk drive is insufficient, recording will stop. The space necessary for recording a one-hour programme may differ.

Note:

- You can record radio programmes also.
- Pressing the **STANDBY** button while recording will not stop the recording. The product will go to standby mode after completing the recording.
- Press the **i** button to view the recording information. Press the arrow key in the i-plate to hide the recording information.

Instant Recording

To record the current programme you are watching, press the **REC** button.
When the programme information is available, only the current programme will be recorded. However, if the programme ends in less than ten minutes, the next programme will be recorded also.
When no programme information is available, the recording will continue for two hours.

Record | Select | OK Confirm | Enter 0~9

Personal Video Recorder

Scheduled Recording

Scheduled recordings will start and end according to the scheduled time.
You can schedule recordings in TV Guide. Go to **MENU > TV Guide**

Setting Start/End Padding Time

MENU → Settings → Preferences → Recording

You can set the recording padding time in case the recording starts earlier or ends later than scheduled.

- **Start Padding Time:** Additional time before the recording starts.
- **End Padding Time:** Additional time after the recording ends.

Recording Conflict

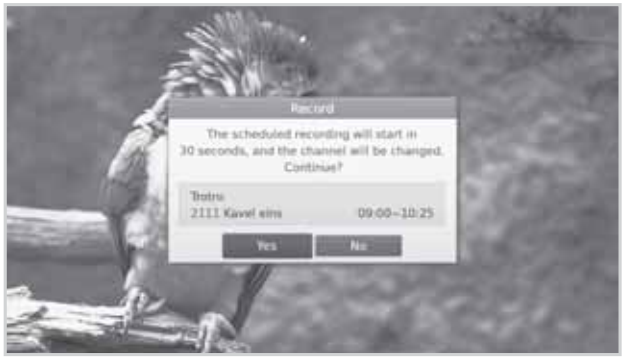
Current recording + scheduled recording

When a programme is being recorded and a second recording is about to start while watching a different channel, you will be prompted to select **Yes** or **No**.

- **Yes**: The channel will change and the scheduled recording will start.
- **No**: Scheduled recording will be canceled.

If no selection is made, the channel will change automatically and the recording will start.

Note: This message will not appear if the two recordings start at the same time. In this case, the channel will change automatically.



Record | Select | OK Confirm | Enter 0~9

Instant recording + scheduled recording

When instant recording conflicts with one of the two scheduled recordings, you can have the recording duration modified automatically or cancel either of the scheduled recordings.

New recording + two scheduled recordings

When a new recording conflicts with one of the two scheduled recordings, you will be prompted to select the recording(s) you want to continue.

1003 SEASONS
Recording Duration Conflict
Cancel one of the previously set recordings to reserve the instant recording duration.
Record modified duration
Cancel: Trotro
Cancel: 1003 SEASONS

Editing Recording Time

1. To edit the recording time, press the **REC** button while recording.
2 Set the recording time manually or record till the end of the current programme or the next.

If the changed recording time conflicts with another scheduled recording, you can cancel changing the recording end time or cancel either of the scheduled recordings.

1003 SEASONS
Recording Duration Conflict
Cancel one of the previously set recordings to change the recording end time.
Cancel changing record end time
Cancel: Trotro
Cancel: 1003 SEASONS

Personal Video Recorder

When recording two programmes, a conflict may occur before a scheduled recording starts. You will be prompted to select two of the programmes and cancel the remaining.

Note: When programme information is provided, each programme will be recorded separately in the media list.

Record | Select | OK Confirm | Enter 0~9

Playback

You can access the recorded file list easily and play the recorded programmes.

- Press the **MEDIA** button.
- Go to **MENU > Video**.

You can perform fast rewind, fast forward, slow motion and pause while playing back a recorded file from the media list.
Press the **PLAY** button while watching a recording to display the playbar.

Note: The playbar is also displayed when pressing the **FF, FB, SLOW** or **PAUSE** button.

To move the play pointer to a certain time point, press the ◄/► button while playing back to play the programme from the specified time point.
Press the **STOP** button to stop the current file and go to live TV.

	Playback
	Fast Forward
	Fast Backward
	Watch the recording in slow video. (1/2, 1/4, 1/8,...)
	Pause the scene. Press the **PAUSE** button again to go back to play mode.
	Move to the previous chapter and replay the scene. (Move to the previous chapter if the playbar is displayed.)
	Move to the next chapter and skip scenes. (Move to the next chapter if the playbar is displayed.)
◄/►	Jump to the previous or next scene.

Note: Chapters are made by dividing the recorded programme into eight portions.

Personal Video Recorder

Setting Bookmark

You can place bookmarks in your favourite scenes and jump to them directly. Up to four bookmarks can be used and the bookmarks remain unless they are deleted.

Note: Bookmarks are available for recorded files only.

Adding a bookmark,

Press the **Add Bookmark** button while watching a recording.
To delete the bookmark, go to the bookmark and press the **Add Bookmark** button again.

Moving to a bookmark,

Press the **Go to Bookmark** button while watching a recording. The play pointer will move to the nearest bookmark. If you press the **Go to Bookmark** button on the last bookmark, the play pointer will move to the first bookmark.

Note: Fast forwarding and jump may not function in programmes restricted by DRM.

Record Select OK Confirm Enter 0~9

Personal Video Recorder

Time Shifted Recording (TSR)

The recorder automatically saves the programmes you watch to the built-in hard disk drive temporarily. This enables you to pause the current broadcast and play, rewind or forward live TV.
TSR lasts for 90 minutes.

To pause the programme you are watching,

Press the **PAUSE** button. Press the **PLAY** button to return. Pause makes a time gap between the live broadcasting point and watching point. The time gap is equivalent to the period the programme has been paused.
Press the **STOP** button to close the time gap and go to live programme.

To rewind and watch missed scenes,

Press the **FB** button. Press the **PLAY** button at the point where you want to start watching. You can pause, rewind or fast forward within the programme.
You can fast rewind back to the start point. If you reach the start point while rewinding, the programme is automatically played at normal speed.

To fast forward and skip scenes,

Press the **FF** button. You can fast forward only when there is a time gap between the current watching point and the live broadcasting point caused by pause, slow motion or fast rewind. You can fast forward up to the current broadcasting point. If you reach the live broadcasting point while fast forwarding, the programme is automatically played at normal speed.

Note: Fast forwarding and jump may not function in programmes restricted by DRM.

Media List

You can playback recordings, music files or photo files.

- Press the **MEDIA** button.
- Go to **MENU ▸ Video/Music/Photo**.

Switching Storage

1. Press the **BLUE** button to display the type of storage.
2. Select the storage type and press the **OK** button.
   - **HDD**: Displays the internal HDD.
   - **USB**: Displays each partition of the USB.
   - **Network**: The DLNA server is searched. Select the type of the server.

Note:

- Only one USB icon will appear even when there are more than one USB.
- The network icon is displayed only when the network has been connected.

Switching Media

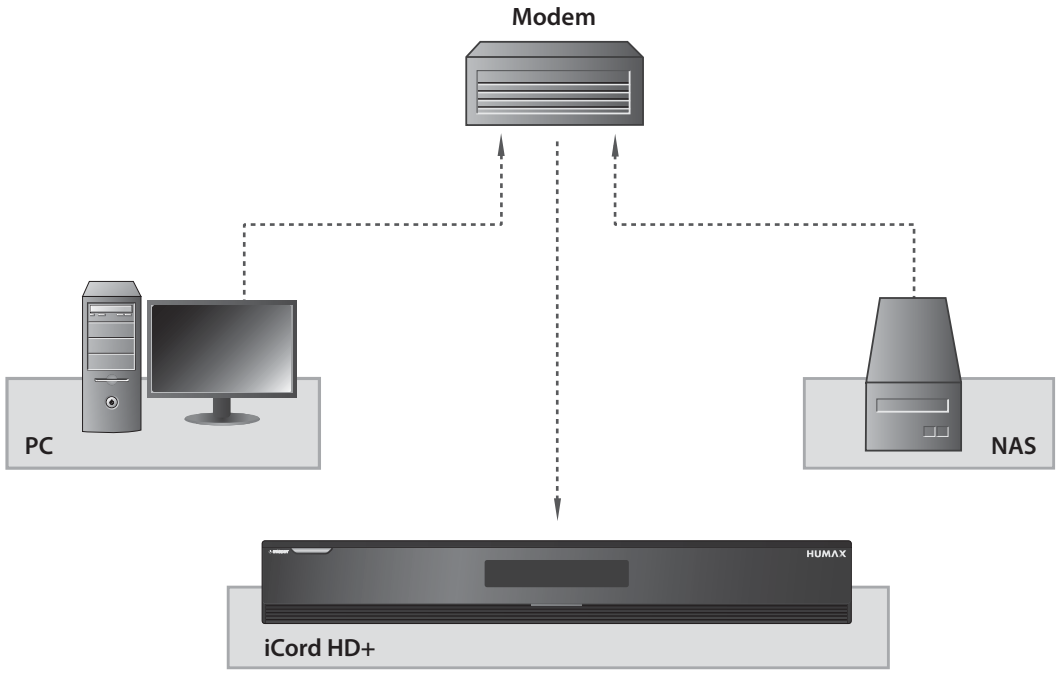
1. Press the **YELLOW** button to switch the media.
2. Select the media type and press the **OK** button.
   - **Video, Music, Photo**

MEDIA MEDIA | Select | OK Confirm | Enter 0~9

Media List

Using the DLNA Server

You can have access to DLNA servers such as the PC or NAS (Network attached storage) and play the video, music, or photo files. To connect to a DLNA server, the receiver must be connected to the local network.



Playing Video Files in Network

1. Go to **MENU>Video.**
2. Press the **BLUE** button and select **Network**.
3. Select the DLNA server from the list and select the folder the video file is located in.
4. Select the video file and play the file.

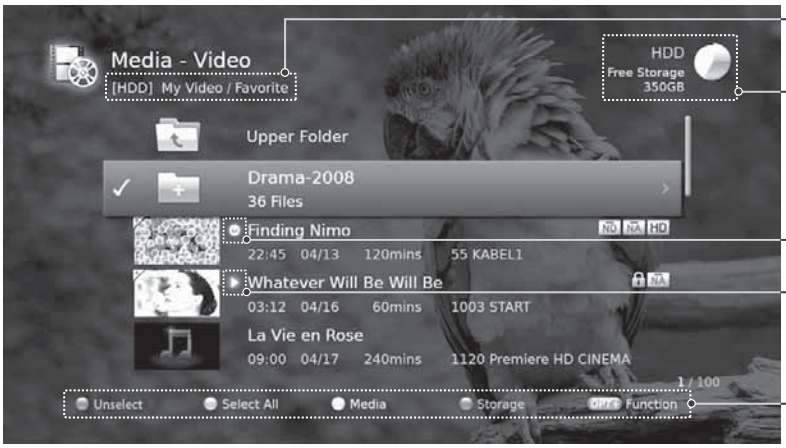
Note:

- Playing music files and photo files is similar as playing video files.
- You can download DLNA tools such as Media Server 11(http://www.microsoft.com/windows/windowsmedia/de/player/11/default.aspx) and XBMC((http://www.xbmc.org). The software can be downloaded and updated in each website.

Media List

Using Video List

MENU → Video



Path of folder

Storage

Recording file

Playback file

Function buttons
: Coloured or **OPT+** button

Playing Files

Select a file and press the **OK** button. Playback will start from the recently viewed point.
To select multiple files, select the files and press the **RED** button.

Note:
- If a folder is selected, the file within the folder will not play unless it is selected.
- You will be prompted to enter the password when playing locked files.
- You can view Xvid files also.
- Files with DRM (Digital Rights Management) expiration dates may expire if not watched before the written date.

Editing Files

Sorting Files

Press the **OPT+** button. Select **Sort** and press the **OK** button. The files will be sorted in alphabetical order.
To sort the files in time order, repeat the procedure.

Note: Sorting files is available for video files only.

Deleting Files

1. Select the file(s) you want to delete and press the **OPT+** button.
2. Select **Delete** and press the **OK** button.
3. Select **Yes** and press the **OK** button.

Note: When deleting a locked file, you will be prompted to enter the password.

MEDIA MEDIA | Select | OK Confirm | Enter 0~9

Media List

Locking Files

1. Select the file(s) you want to lock and press the **OPT+** button.
2. Select **Lock** and press the **OK** button.
3. To unlock, press the **OPT+** button again and select **Unlock**.
4. Enter the password.

Moving Files

1. Select the file(s) you want to move and press the **OPT+** button.
2. Select **Move** and press the **OK** button.
3. Select the folder or storage you want to move the file to and press the **OK** button.

➤ **Moving the file within the same storage**: Select the folder you want to move the file to and press the **OK** button.

➤ **Copying the file to another storage**: Select the storage and then select the folder to copy the file to. Press the **OPT+** button to rename the folder.

Note:

- When moving a locked file, you will be prompted to enter the password.
- When moving the file to a different storage, it will be copied. However, video files cannot be copied to other storages.

Renaming Files

1. Select the file you want to rename and press the **OPT+** button.
2. Select **Rename** and press the **OK** button.
3. Enter the name of the file in the keyboard and press the **YELLOW** button.

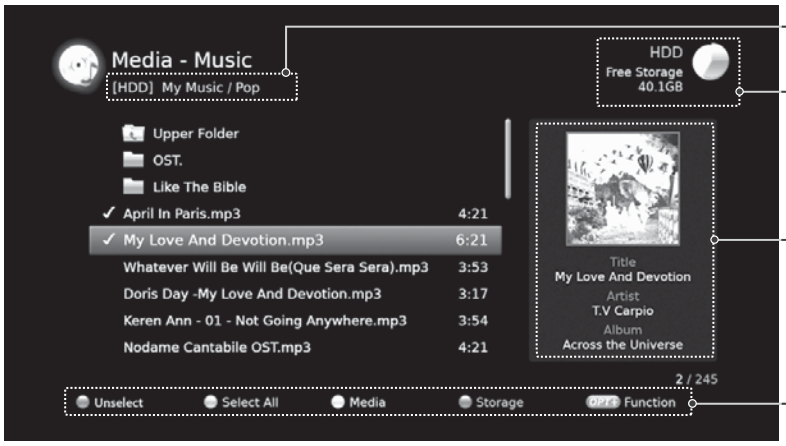
Creating Folder

1. Press the **OPT+** button.
2. Select **New Folder** and press the **OK** button.
3. Enter the name of the file in the keyboard and press the **YELLOW** button.

Media List

Using Music List

MENU → Music



Path of folder

Storage

Title, artist, album

Function buttons
: Coloured or **OPT+** button

Playing Music Files

To play all files in the folder, press the **OK** button. If you want to play the selected files only, select the files and press the **OK** button.

Music Player

The music player is displayed while playing back a music file.

OK	Plays or pauses	▶	Plays
◀◀	Plays the previous file	❚❚	Pauses
▶▶	Plays the next file	■	Stops the music player and displays the list
EXIT	Exits the music player	⏮	Plays the first file
RED	Changes the play mode (once, repeat, shuffle)	⏭	Plays the last file

Editing Files

Go to **Editing Files** in **Using Video List**.

MEDIA MEDIA | Select | OK Confirm | Enter 0~9

Media List

Using Photo List

MENU → Photo

Photo Slideshow

To slideshow all photos in the folder, press the **OK** button. If you want to slideshow the selected photos only, select the photos and press the **OK** button.

Path of folder

Storage

Thumbnail

Function buttons
: Coloured or **OPT+** button

OK	Pauses slideshow		Stops slideshow and displays photo list
▶▶	Shows the next photo	▶	Continues slideshow
◀◀	Shows the previous photo	⏮	Shows the first photo
EXIT	Exits slideshow	⏭	Shows the last photo

Info Banner

Press the **PAUSE** button to pause the slideshow and display the information banner.

MEDIA MEDIA | Select | OK Confirm | Enter 0~9

Media List

Editing Files

Go to **Editing Files** in **Using Video List**.

Slide Mode

1. Press the **OPT+** button.
2. Select **Slide Mode** and press the **OK** button.

➤ **Display Time**: The duration the photo is displayed
➤ **Music Play**: Determines whether to play music file during slideshow or not
➤ **Folder**: The folder the music file is located in. Press the **OK** button to display the list of music files and select a folder.

MEDIA MEDIA | Select | OK Confirm | Enter 0~9

HUMAX TV Portal

MENU → HUMAX TV Portal

HUMAX TV Portal is a web service portal which allows you access to TV catch-up, YouTube, VOD, Internet Radio, and HUMAX support. You can also view past programmes using this service.
You can access HUMAX TV Portal in several ways.

- ❖ Go to **MENU > HUMAX TV Portal**.
- ❖ Press **TV Portal** while watching a programme.

Note:

- If you press **TV Portal** while playing back a TSR recording or a currently recording programme, the screen will jump to live TV and then move to the TV Portal screen.
- If you press **TV Portal** while playing back a video, music or photo file, you will be prompted to stop playback and go to the TV Portal screen.
- Press the **EXIT** button to exit HUMAX TV Portal.

TV Catch-Up

Connects to the TV Catch-Up website.

YouTube

Connects to the YouTube website.

Internet Radio

Displays the radio station list. You can view your favourite radio channels, list the radio channels according to category or country, search radio channels or view your recent channels.

HUMAX Support

Provides FAQs, glossary and service related information. Software update through the network is also possible if the network is connected through the LAN.

HUMAX TV Portal

Interactive Service

To have access to various interactive applications, make sure that the product is connected to the internet.
Interactive service is provided via the network and can be accessed using the colour buttons on your remote control.

Note: The type of interactive service may vary.

MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Preferences

In this chapter you can set options for parental control, language, time, video, audio and others.

Note: Press the **MENU** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

Parental Control

MENU → Settings → Preferences → Parental Control

You will be prompted to enter the password to access this menu.

Note: The default password is 0000. If you have forgotten your password, please contact your local distributor.

Changing Smartcard PIN-Code

You can change the current Smartcard PIN-Code.

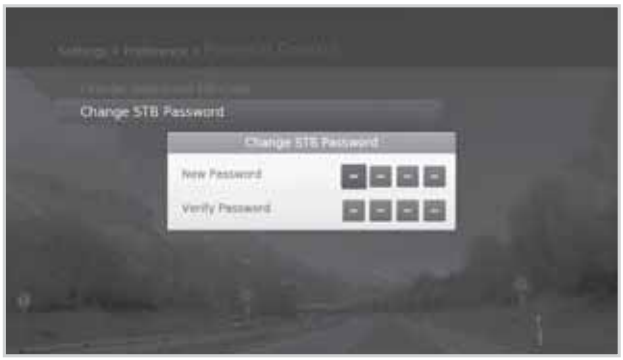
1. Select **Change Smartcard PIN-Code**.
2. Enter the new Smartcard PIN-Code.
3. If you enter the wrong Smartcard PIN-Code three times, the receiver will lock for 10 minutes.

Note: You must enter the Smartcard PIN-Code to watch programmes blocked by the age limit during the hours below.

- **6:00~22:00**: PIN-Code is required if the programme is for 16+.
- **22:00~6:00**: PIN-Code is required if the programme is for 18+.

Changing STB Password

You can change the current password. This password is prompted every time a password blocked menu is accessed.



1. Select **Change STB Password**.
2. Enter the new STB password.
3. Enter the new STB password for verification.

Preferences

Language Setting

MENU → Settings → Preferences → Language

1. Select **System Language**, **Audio Language** or **Subtitle Language**.
2. Select the language.

Note:
- If you select **Off** in subtitle language, the subtitle will not be displayed.
- You can change the audio or subtitle language by pressing the **AUDIO** or **SUBTITLE** button while watching a programme.

Setting Power On/Off Timer

MENU → Settings → Preferences → Time

1. To turn on the product automatically, select **Power On Timer** and select **Set Timer**.
2. Enter the time.
3. Set the options for the power on timer.
   - ➤ **Channel**: Select the channel to be displayed when powering on.
   - ➤ **Volume**: Adjust the volume of the audio when powering on.
   - ➤ **Repeat**: Select the repeat mode of the power on timer.
4. To turn off the product automatically, select **Power Off** Timer and select **Set Timer**.
5. Enter the time.

Note:
- The power on time and power off time should be set different from each other.
- The TVTV EPG update time and power on time should be set different from each other.

Video Setting

MENU → Settings → Preferences → Video

Setting TV Screen Ratio

You can select the screen ratio of your TV.

1. Select **Screen Ratio**.
2. Select an option.
   - ➤ **16:9 - 4:3**

Setting Display Format

You can select the display format according to the screen ratio of your TV.

1. Select **Display Format**.
2. Select an option.
   - ➤ Screen ratio 4:3: **Auto - Letterbox - Centre**
   - ➤ Screen ratio 16:9: **Auto - Pillar Box - Zoom**

Note: You can set the display format by pressing the **WIDE** button while watching a programme. Refer to ***Display Format / Resolution***.

Screen ratio	Display Format		
4:3	Auto	Letterbox	Centre
16:9	Auto	Pillar Box	Zoom

Setting Letter and Pillar Box Colour

You can set the colour for the margin space according to the display format.

1. Select **Letter & Pillar Box Colour**.
2. Select an option.
   - ➤ **Black - Gray**

Setting TV SCART / VCR SCART

You can select the video signal output option for the TV SCART or VCR SCART.

1. Select **TV SCART** or **VCR SCART**.
2. Select an option.
   - ➤ TV SCART: **CVBS – S-Video – RGB**
   - ➤ VCR SCART: **CVBS – S-Video**

Preferences

Audio Setting

MENU → Settings → Preferences → Audio

Setting Digital Audio Output

You can select the digital audio signal output of your product.

1. Select **Digital Audio Output**.
2. Select an option.
   - ➤ **Stereo - Multi-channel**

Setting Lip-Sync

You can adjust the sound difference of audio and video.

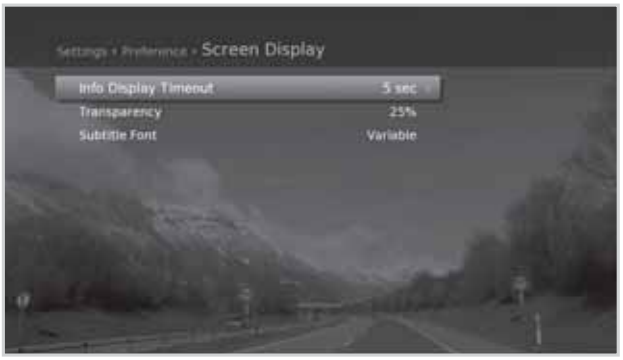
1. Select **Lip-Sync**.
2. Adjust the lip-sync using the ◀/▶ button. Pressing the right button increases the audio speed and pressing the left button decreases it.

Screen Display

MENU → Settings → Preferences → Screen Display

Setting Info Display Time

You can set the duration the information box is displayed every time the channel is switched.



1. Select **Info Display Time**.
2. Select an option.
   - ➤ **Off - 1~20 sec**

Setting Transparency

You can set the transparency of the On-Screen Display.

1. Select **Transparency**.
2. Select an option.
   - ➤ **Off - 25% - 50% - 75%**

Setting Subtitle Font

You can adjust the subtitle font.

1. Select **Subtitle Font**.
2. Select an option.
   - ➤ **Variable - Fixed**

Installation

Installation menu allows you to configure your antenna and search the available TV and radio channels. You can configure the fixed antenna, SCD antenna or motor antenna with this receiver. LCN channels update, software update and default setting are also available in this section.

MENU → Settings → Installation

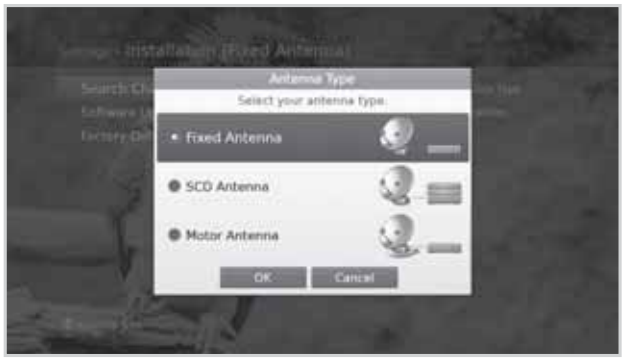
Note:

- You will be prompted to enter the password to access this menu. The default password is 0000. If you have forgotten your password, please contact your local distributor.
- Press the **BACK** button to save the changes and return to the previous screen. Press the **MENU** or **EXIT** button to exit.

Changing Antenna Type

1. Press the **RED** button.
2. Select your antenna type.
   - ➤ **Fixed Antenna**
   - ➤ **SCD Antenna**
   - ➤ **Motor Antenna**
3. Select **OK** to save and exit.

Note: All channels will be deleted when the antenna type is changed.



MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Search Channels [Fixed Antenna]

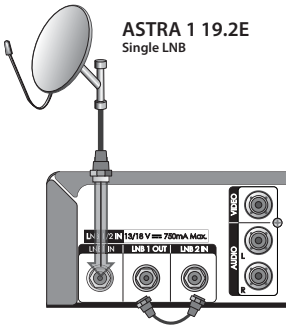
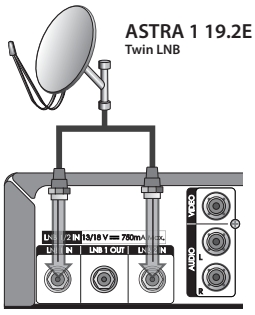
MENU → Settings → Installation → Search Channels

You can search channels by selecting the switch type and setting the required satellite.

Note: If the antenna is not properly set, channel search cannot be activated which means you cannot watch any of the programmes on air.

Using LNB Switch Only

You can either connect to a single satellite (loop though) or two satellites.

When connecting loop through, the specified functions for 2 tuners will be not available.	This connection will allow you to view different channels while recording or record two channels at the same time.
	

Installation

1. Select **Switch Type** and select **LNB Only**.
2. Select the satellite to configure the satellite setting options.
   - ➤ **Satellite**: Select the satellite. Select **User Define** to enter the options directly.
   - ➤ **LNB Frequency**: Set the LNB frequency.
   - ➤ **Test Transponder**: Configure the transponder setting.
3. Select **OK**.
4. Select **Search** and press the **OK** button.
5. Select **Save** and press the **OK** to save the results.

Note:

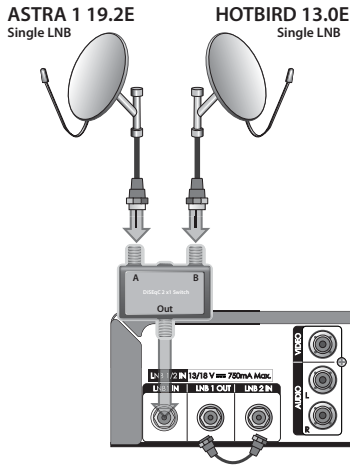
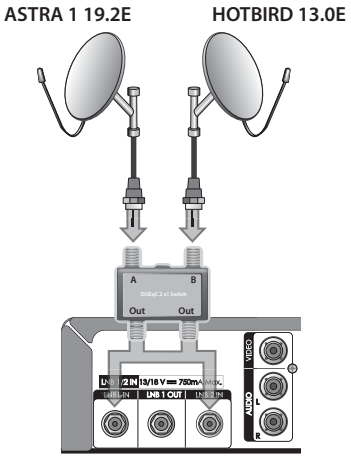
- Select **Stop** and press the **OK** button to stop the channel search.
- Transponder is activated only when the satellite has been selected.

MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Installation

Using DiSEqC Switch

You can either connect to a single satellite (loop though) or two satellites.

When connecting loop through, the specified functions for 2 tuners will be not available.	This connection will allow you to view different channels while recording or record two channels at the same time.
	

1. Select **Switch Type** and select **DiSEqC**.
2. Select the satellite to configure the satellite setting options.
   - ➤ **Satellite**: Select the satellite. Select **User Define** to enter the options directly.
   - ➤ **LNB Frequency**: Set the LNB frequency.
   - ➤ **22kHz Tone**: Select **On** when using two antennas connected to a 22kHZ tone switch box.
   - ➤ **DiSEqC**: Select the DiSEqC switch.
   - ➤ **Test Transponder**: Configure the transponder setting.
3. Select **OK**.
4. Configure the next satellite if you have more than one satellite.
5. Select **Search** and press the **OK** button.
6. Select **Save** and press the **OK** to save the results.

Note:

- Select **Stop** and press the **OK** button to stop the channel search.
- Transponder is activated only when the satellite has been selected.

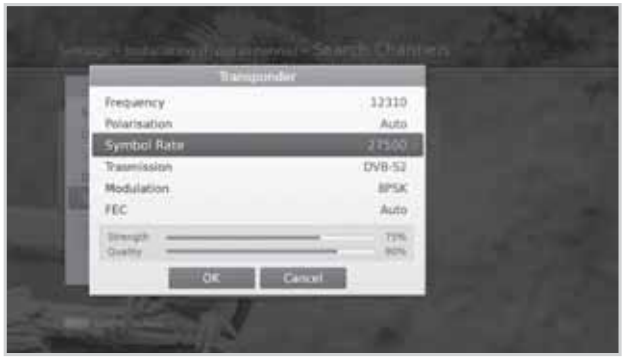
Installation

Transponder List

The transponder setting is normally fixed. Change only when necessary.

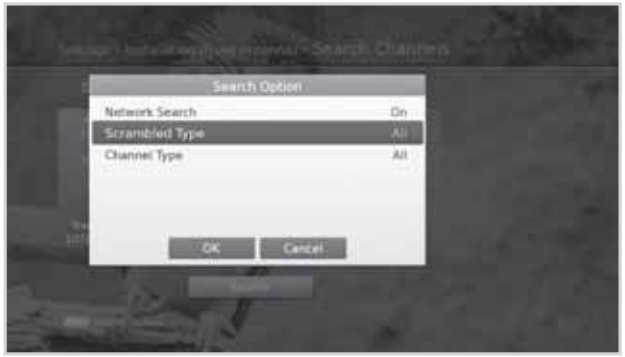
1. Select **Transponder** in **Search Channels** to display the transponder list. You can also select **Test Transponder** in **Satellite Setting**.
2. Select the transponder option. Select **User Define** to enter the transponder setting options directly.
   - **Frequency**: Enter the frequency of the transponder.
   - **Polarisation**: Select the polarisation of the transponder.
   - **Symbol Rate**: Enter the symbol rate of the transponder.
   - **Transmission**: Select **DVB-S2** for HD broadcasts.
   - **Modulation**: Select **QPSK** or **8PSK** when selecting **DVB-S2** in **Transmission**.
   - **FEC**: Select the FEC of the transponder.
3. Select **OK**.

Note: Transponder is activated only when the satellite has been selected.



Setting Search Options

1. Press the **OPT+** button.
2. Set the search options.
   - **Network Search**: Search transponders of all network
   - **Scrambled Search**: Free channel, CAS or all channels
   - **Channel Type**: TV, radio or all channels
3. Select **OK**.



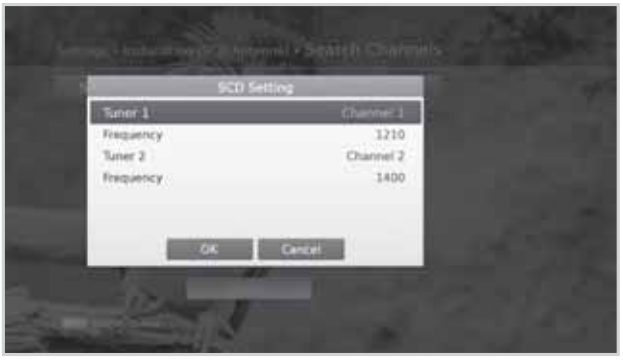
Search Channels [SCD Antenna]

MENU → Settings → Installation → Search Channels

Single Cable Distribution enables the delivery of broadcast programming over a single cable to multiple users eliminating the numerous cables required to support other electronics devices.
If you are using more than one satellite receiver, set one receiver at a time and turn off the others while setting. Refer to the satellite antenna manual for details.

Using SCD Antenna

1. Select **SCD Setting** and press the **OK** button.
   - **Tuner1**: Select from Channel 1~8.
   - **Frequency**: The frequency is set based on the channel of tuner1.
   - **Tuner2**: Select from Channel 1~8.
   - **Frequency**: The frequency is set based on the channel of tuner2.
2. Select **OK**.
3. Select the satellite to configure the satellite setting options.
   - **Satellite**: Select the satellite. Select **User Define** to enter the options directly.
   - **LNB Frequency**: Select the LNB frequency.
   - **Test Transponder**: Configure the transponder setting.
4. Select **OK**.
5. Select **Search** and press the **OK** button.
6. Select **Save** and press the **OK** to save the results.



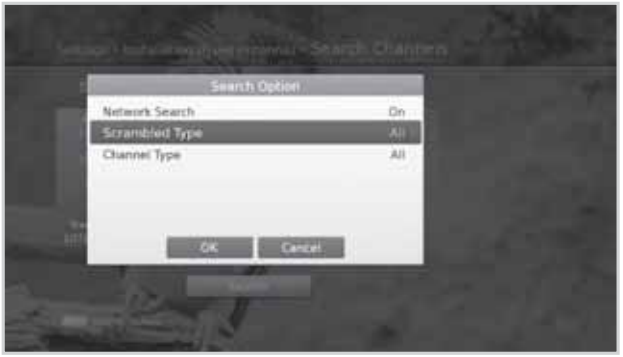
Installation

Note:

- The channel and frequency of tuner1 and tuner2 should be different from each other.
- Select **Stop** and press the **OK** button to stop the channel search.
- Transponder is activated only when the satellite has been selected.
- Go to **Transponder List** for details in transponder setting.

Setting Search Options

1. Press the **OPT+** button.
2. Set the search options.
   - **Network Search**: Search transponders of all network
   - **Scrambled Search**: Free channel, CAS or all channels
   - **Channel Type**: TV, radio or all channels
3. Select **OK**.



MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Search Channels [Motor Antenna]

MENU → Settings → Installation → Search Channels

You can set the position of the satellites when using a motor antenna for efficient channel search.

Motor Setting

1. Select **Motor Setting** and press the **OK** button.
2. Select **Motor Type**.
   - ➤ **DiSEqC1.2**: General motor antenna using DiSEqC 1.2
   - ➤ **USALS**: Motor antenna using USALS
3. Select **My Longitude** and enter the longitude and direction.
4. Select **My Latitude** and enter the latitude and direction.
5. Select **LNB Frequency** and enter the LNB frequency.
6. Select **OK**.

Note:

- When **Motor Type** is set as **DiSEqC 1.2**, both **My Longitude** and **My Latitude** are inactivated.

Edit Satellite Data

You can set the position of the satellite that the motor antenna is pointing to.

1. Select **Edit Satellite Data** and press the **OK** button.
2. Select the satellite the motor antenna is pointing to.
3. When selecting **User Define**, enter the **Longitude** and **Direction**.
4. Press the **BACK** button to save and return.

Installation

Position Setting

1. Select **Position Setting**.
2. Select **Satellite** and select the satellite.
3. Select **Transponder** and select the transponder.
4. Select **Motor Driving** and select the motor driving option.
   - ➤ **Continuous, Step, Time**

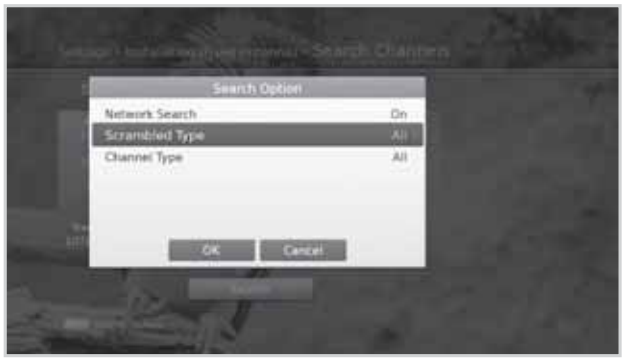
   Select the **Driving Size** from **1~127** when choosing **Step** or **Time**.
5. Select **Go to Stored Position** to make the antenna turn toward the position of the selected satellite.
6. Select **Store Current Position** to save the adjusted position.
7. Select **Recalculate** to recalculate the position of the satellite based on one satellite.

Limit Setting

Set the default setting and operation limit for the motor antenna.

1. Select **Limit Setting**.
2. Select **Limit Position** to set the limit position to East or West.
3. Select **Set Limit** to move the antenna to East or West.
4. Select **Reset Position** to restore the position saved at the motor antenna to the factory default.

Setting Search Options



1. Press the **OPT+** button.
2. Set the search options.
   - ➤ **Network Search**: Search transponders of all network
   - ➤ **Scrambled Search**: Free channel, CAS or all channels
   - ➤ **Channel Type**: TV, radio or all channels
3. Select **OK**.

Search

1. Select **Search** and press the **OK** button.
2. Select **Save** and press the **OK** to save the results.

Note:
- Select **Stop** and press the **OK** button to stop the channel search.
- Transponder is activated only when the satellite has been selected.

Update LCN Channels

MENU → Settings → Installation → Update LCN Channels

Updating LCN channel list

1. Select **Update LCN Channel List**.
2. The LCN channel list will be updated. If there is no channel to update, a message will appear.

Changing LCN channel list

1. Select **Change LCN Channel List**.
2. The **LCN Channel List** will appear. Select the LCN channel list you want to apply.

Installation

Software Update

MENU → Settings → Installation → Software Update

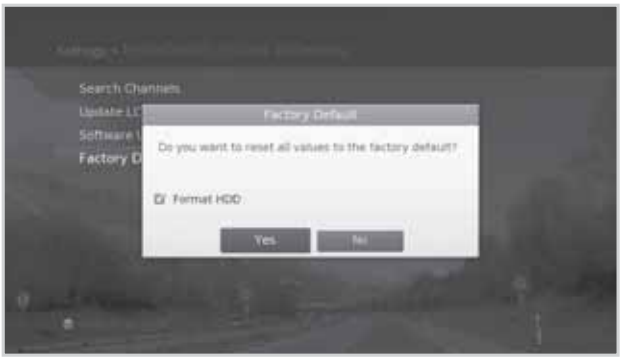
1. Select **Software Update**.
2. Select **Automatic Update** if you want to update the software according to the saved transponder.
3. Select **Manual Update** if you want to update the software by entering the options manually.
   - **Satellite**: Select the satellite. Select **User Define** to enter the options directly.
   - **Frequeucy**: Enter the frequency of the transponder.
   - **Polarisation**: Select the polarisation of the transponder.
   - **Symbol Rate**: Enter the symbol rate of the transponder.
   - **FEC**: Select the FEC of the transponder.

Factory Default

MENU → Settings → Installation → Factory Default

1. Select **Factory Default**
2. A popup will appear. Select **Yes**.
3. You will be prompted to enter the password. Enter the password.

Note: To format the HDD, mark **Format HDD**.



MENU Menu On/Off | Select | OK Confirm | Enter 0~9

OTA (Over the Air)

In order to maintain proper performance of the product, it is essential to have the most up-to-date software. Visit the Humax website to check the latest news and newly released software versions. ***(http://www.humaxdigital.com)*** It is recommended that you periodically check for the availability of software update.

OTA, an abbreviation of ***Over-the-Air***, is a standard for the transmission of software through a broadcast system. OTA is simply an alternative method for downloading software versions. However, the manufacturers reserve the right for deciding the release of the software for their products by beaming the latest software versions over the air via satellite. Note that OTA is only limited to certain geographical regions mainly due to different antennas having different footprints (area where the signal can be received). The software update via satellite will only occur under the following circumstances.

1. The equipment should have the appropriate loader software.

Caution: Please note that if the normal loader software is not equipped, the product may not be updated or operate properly after software update.

2. The manufacturer decides to release the software via a designated satellite.
3. The equipment must be tuned properly to the same antenna equivalent to that of the manufacturer.
4. Update software when the signal strength and quality is high. If the weather is not favorable, and the signal strength and quality are not recommendable, perform the software update later.

Caution:

- Please be careful to keep the power on and the power cord plugged in during software update. If the power is off during software update, fatal damage may be caused to the product.
- Please be careful not to pull out the signal line (LNB cable) during software update. Update may be interrupted and the product may not operate.

Note:

- It may take 5~10 minutes to update software.
- ther functions will not activate while software update takes place.
- You cannot schedule programmes during software update.

Updating New Software

When new software is detected, you can choose to download the software immediately or later.

- **Yes**: Update the software now.
- **No**: Ignore the message.
- **Later**: Message will reappear next time you power on.

If you select **Later**, you can have the software downloaded during standby. Note that all functions will be disabled during software update.

System

In **System**, you can view the information of the system, signal detection, Smartcard, CI-Module and data storage. Power management, TVTV EPG and network options are also available in this section.

Note: Press the **MENU** or **EXIT** button to exit. Press the **BACK** button to return to the previous screen.

System Information

MENU → Settings → System → System Information

The system information is displayed.

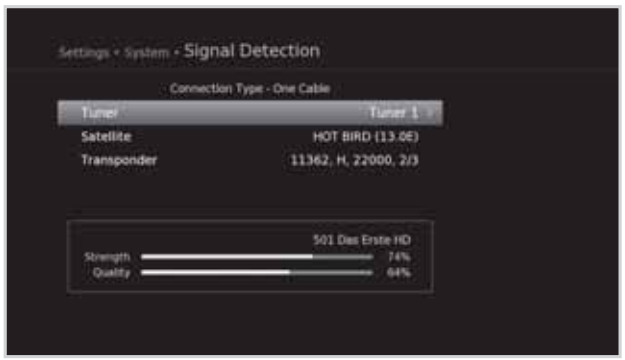
Signal Detection

MENU → Settings → System → Signal Detection

You can check the signal strength and quality of the searched channels.

Select a tuner, satellite or transponder you want to check.

Note: This menu will not activate while recording.



MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Power Management

MENU → Settings → System → Power Management

You can minimise the standby power consumption to below 1W.

Select **On** to turn off the LCD and minimise the power consumption.

TVTV EPG

MENU → Settings → System → TVTV EPG

You can choose to receive the TVTV EPG data.

1 Select **TVTV EPG** and select **On**.
2 Select **Update Time**.
3 Select an option.
   - ➤ **Standby**: The TVTV EPG data is updated during standby.
   - ➤ **Set Timer**: Enter the specific update time manually

Note:

- The TVTV EPG update time and power on time should be set different from each other.
- Go to **TV Guide > Highlights** for details.

System

Common Interface

MENU → Settings → System → Common Interface

The common interface information is displayed.

Smartcard

MENU → Settings → System → Smartcard

The smartcard information is displayed.

MENU Menu On/Off | Select | OK Confirm | Enter 0~9

Data Storage

MENU → Settings → System → Data Storage

You can check the size of the internal HDD or external USB storage device.

1 Select **Internal HDD** or **USB** to display the details for each storage.
2 To format the selected storage, select **Format Storage**. If you select **Yes**, you will be prompted to enter the password.

Note:

- The default password is 0000. If you have forgotten your password, please contact your local distributor.
- Features according to USB format
  - ➤ **EXT3**: Record, ready, copy(MP3, JPEG, Xvid)
  - ➤ **FAT**: Read, copy (MP3, JPEG, Xvid)
  - ➤ **NTAS**: Read, only (MP3, JPEG, Xvid)

System

Network

MENU → Settings → System → Network

Configuring Wi-Fi (wireless)

1. Select **Configure Wi-Fi**.
2. The wireless LAN network list will appear. Select your Wi-Fi network and press the **OK** button.
3. If your Wi-Fi network is not listed, select **Input network name** and enter the name in the keyboard.
4. Configure the Wi-Fi setting options.
   - ➤ **Network Name**: The Wi-Fi network name
   - ➤ **Security Type**: The Wi-Fi security type
   - ➤ **Password**: The Wi-Fi password.

Configuring IP (LAN)

1. You can configure the Ethernet setting options.
   - ➤ **DHCP**: Apply the options according to the DHCP.
   - ➤ **Manual**: Enter the options manually,

Select **Apply** and press the **OK** button.

Note:
- When entering the IP address manually, enter 3 digits in a row.
- The network is connected by LAN when both WiFi and LAN are activated.
- HUMAX recommends the network connection over a direct LAN or the HUMAX powerline AV adaptor.

Appendix

Specification

Tuner & Channel	
No. of Tuners	2
Input Connector	F-Type, IEC 169-24, Female
Frequency Range	950MHz to 2150MHz
Signal Level	-25 to -69dBm
LNB Power & Polarisation	Vertical : +13.5V (+14.5V at high voltage) Horizontal : +18.3V (+19V at high voltage) Current : Max. 500mA (Overload protection)
22KHz Tone	Frequency : 22 ± 4KHz Amplitude : 650mV ± 250mV
DiSEqC Control	Version1.0, 1.2, USALS
Audio/Video Decoding	
Audio Decoding	MPEG/MusiCam Layer I & II, Dolby Digital, Dolby Digital Plus
Audio Mode	Single channel/Dual channel/Joint stereo/Stereo
Video Decoding	MPEG-2 ISO/IEC 13818 H.264 AVC Transport Stream Specification
Video Format	4:3, 16:9
Video Resolution	1080i, 720p, 576p, 576i
Memory	
Flash Memory	32MB
RAM	320MB
EEPROM	8KB
Audio/Video In/Out	
Video	TV-SCART, VCR-SCART, RCA, HDMI/HDCP
Audio	TV-SCART, VCR-SCART, Audio L/R, S/PDIF (Digital Audio Output)
Data In/Out	
USB	USB 2.0 Host (5 V = 500, 250mA Max.)
RJ-45	Ethernet 10/100Mbps
Hard Disk	
HDD	320/500/1024GB

Appendix

Power Supply	
Input Voltage	90-250V a.c., 50/60Hz
Type	SMPS
Power Consumption	Max. 50W (Standby: Max.1W)
Protection	Separate internal fuse. The input should be protected against lightning.
Physical Specification	
Size (w/h/d)	380mm×55mm×252mm
Weight	3.55kg
Operating Temperature	0 °C to +45 °C

Note: The specifications are subject to change without notice.

Appendix

Service and Support

Information concerning troubleshooting, software upgrade and product support is provided in the following websites and call centers. Should your product require warranty service, please contact HUMAX to obtain the appropriate authorization.

HUMAX Call Center

Austria	**Tel:** **Opening Hours:** **E-mail:** **Website:** **Language:**	0820 400675 (€ 0,14/min) Mon-Sun 8:00-23:00 support@humax-digital.de www.humax-digital.de Deutsch/English/Turkish
Deutschland	**Tel:** **Öffnungszeiten:** **E-mail:** **Website:** **Sprache:**	01805-778870 (€ 0,14/Min) Mo-So 8:00-20:00 Uhr support@humax-digital.de www.humax-digital.de Deutsch/Englisch/Türkisch
Italia	**Tel:** **Orario:** **Lingua:**	899 100 080 (€1+ VAT/min) Lun.-Ven. 8:00-18:00 Italiano
Suomi	**Puh:** **Aukioloajat:** **Kieli:**	+358 9 56186 130 ma-pe 8:00-16:00 Suomi/Englanti
Sverige	**Tfn:** **Öppettider:** **Språk:**	+46 (0)550 85527 Mån-fre 08:00-16:30 Svenska/Engelska
UK	**Tel:** **Opening Hours:** **E-mail:** **Website:** **Language:**	0870 247 8800 Mon-Fri 8:30-21:00 uksupport@humax-digital.co.uk www.humax-digital.co.uk English

Appendix

Safety Warning

This product has been manufactured to comply with international safety standards. Please read the following safety precautions carefully.

Safety Instructions and Precautions

1. **MAINS SUPPLY**
   - Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company.
   - Disconnect the product from the mains before you start any maintenance or installation procedures.
2. **OVERLOADING**
   - Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.
3. **LIQUID**
   - The product should not be exposed to liquid of any kind. In addition, no objects filled with liquid should be placed on the apparatus.
4. **CLEANING**
   - Disconnect the product from the wall outlet before cleaning.
   - Use a light damp cloth (no solvents) to dust the product.
5. **VENTILATION**
   - The slots on top of the product must be left uncovered to allow proper airflow into the unit.
   - Do not stand the product on soft furnishings or carpets.
   - Do not stack electronic equipments on top of the product.
6. **ATTACHMENTS**
   - Do not use any unsupported attachments as these may be hazardous or cause damage to the product.
7. **LIGHTNING, STORM OR NOT IN USE**
   - Unplug the product from the wall outlet and disconnect the antenna during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.
8. **EXTRANEOUS OBJECTS**
   - Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts.
9. **REPLACEMENT OF PARTS**
   - When replacement of parts is required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitution may result in additional damage to the unit.
10. **CONNECTION**

    [Satellite] CONNECTION TO THE SATELLITE DISH LNB
    - Disconnect the product from the mains before connecting or disconnecting the cable from the satellite dish. Failure to do so can damage the LNB.

    [Cable] CONNECTION TO THE CABLE TV SIGNAL
    - Connect all components before plugging any power cords into the wall outlet. Always turn off the product, TV and other components before you connect or disconnect any cables.

    [Terrestrial] CONNECTION TO THE AERIAL
    - Disconnect the product from the mains before connecting or disconnecting the cable from the aerial. Failure to do so can damage the aerial.

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11. CONNECTION TO THE TV

- Disconnect the product from the mains before connecting or disconnecting the cable from the TV. Failure to do so can damage the TV.

12. EARTHING

[Satellite] The LNB cable must be earthed to the system earth for the satellite dish.

13. LOCATION

- Place the product indoors to avoid exposing it to lightning, rain or sun. Do not place it near a radiator or heat register.
- We recommend that the product has 10 cm clearance from any other appliances susceptible to electromagnetic influences, such as a TV or a VCR.
- Do not block the openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.
- If you place the product on a rack or a bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.
- Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adult, and serious damage to the appliance.

Warning

1. To avoid damage of the power cord or plug;

- Do not modify or process the power cord or plug arbitrarily.
- Do not bend or twist the power cord.
- Make sure to disconnect the power cord holding the plug.
- Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
- The mains plug, as a disconnection device, shall remain readily accessible by the user.

2. To avoid electrical shock;

- Do not open the main body.
- Do not insert metal or inflammable objects inside the product.
- Do not touch the power plug with wet hands.
- Disconnect the power cord in case of lightning.

3. To avoid damage of product;

- Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused. Make sure to contact your local product distributor if the product is out of order.
- Do not insert metal or alien substance into the slots for the modules or Smartcards. (where applicable) It may cause damage to the product and reduce its life span.

4. To avoid damage of the hard disk drive (PVR only)

- Do not move the product or turn the power off suddenly while the hard disk drive is running.
- The company shall not be liable for any corruption of data on the hard disk drive caused by carelessness or misuse.

Appendix

Trouble Shooting

Before contacting your local service centre, please read the tips below carefully. If the problem persists after completing the following procedure, please contact your local product distributor or service centre for further instructions.

1. **No message displayed on the front display. (The product will not switch on.)**
   - Check the main power cable and make sure it is plugged into a suitable power outlet.
   - Check that the mains supply is switched on.
   - Connect the power cable to a different power outlet.
   - Check that the power switch is on at the rear of the product. (where applicable)
2. **No picture**
   - Make sure that the product is powered on and in operation mode. (Press the **STANDBY** button)
   - Make sure that the AV cable is firmly connected to the TV.
   - Make sure that the antenna cable is properly connected to the product.
   - Be sure to activate channel search.
   - Check the brightness level of the TV.
   - Check if the channel is currently on air. Contact the broadcaster to ensure that the channel is running.
   - Press the SOURCE button if the product is in external input mode. (where applicable)
   - **Satellite:** Make sure that the antenna setting in the menu is correct.
3. **Poor picture/sound quality**
   - Install the antenna in an obstacle-free place.
   - Make sure there is no mobile phone or microwave oven near the product.
   - Keep the power and the antenna cables apart from each other.
   - Check the signal levels and adjust your antenna if the level is too low. The signal level may be affected by weather conditions.

Note: If the antenna is covered with snow or the RF is weakened by heavy rain, the condition of the sound and picture may temporarily be poor. However, the poor sound and picture quality due to weather conditions cannot be accepted as a malfunction of product.

- **[Satellite]** Check that your dish alignment is correct.
- **[Satellite]** Change the satellite dish for a larger one as this will increase the signal levels received.
- **[Satellite]** Replace the LNB with a lower noise factor in cases where the noise factor is too high.
- **[Satellite]** Replace the LNB with a new one in case it is damaged or out of order.
- **[Terrestrial]** Adjust the antenna direction to get a better picture.
- **[Terrestrial]** Set the antenna power in menu to On, if you use the active antenna to improve the reception. (where applicable)

4. **No or poor sound**
   - Check that your AV cable is connected correctly.
   - Check the volume levels of your TV set and the product.
   - Check if the product or TV is on mute.
   - Check audio type or soundtrack option in the AV menu. (where applicable)
5. **Remote control does not operate.**
   - To control the product, the top end of the remote control should point directly towards the receiving part of the product.
   - Remove and reinsert the batteries in the remote control.
   - Replace the batteries in the remote control for a new set.
   - Set the remote control to STB or PVR mode, if you are using the universal remote control. (where applicable)

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6. Cannot make reservations.
- Check that no previous reservations are conflicting with the new reservation.

7. No password information is given.
- The default password is always **0000**.

8. Channel search does not work.
- **Satellite:** Make sure that the antenna setting in the menu is correct.
- **Terrestrial:** Make sure that the antenna is connected correctly.
- **Terrestrial:** Use the appropriate antenna capable of receiving VHF or UHF channels for your area.

9. Cannot update new software.
- You can get an update. If the product does not show a message requesting update, this means no software is available.

10. Cannot watch scrambled channels.
- Check that you have the appropriate Smartcard or CI-Module. Reinsert the Smartcard or CI-Module and make sure it initialises correctly.
- Check in the menu that the product is detecting the Smartcard or CI-Module.
- Check in the menu that you have a valid and working subscription to the channels you wish to view.
- Ensure that the Smartcard or CI-Module is not damaged.

11. Cannot watch pay channels.
- Check in the menu that you have a valid and working subscription to the channels you wish to view.
- Contact your network operator for more information.

12. The product makes a humming noise.
- The noise is from the fan; the hard disk is operating normally. This kind of noise is inevitable but seldom noticeable.

13. Cannot record progammes. (PVR only)
- The hard disk is full. Delete unnecessary programmes and make space for new recording.
- Check if recording is overlapped with another channel. Stop the current recording or wait until the recording is finished.
- Check that the product is switched on when recording starts.

14. Cannot operate TSR (Time Shifted Recording). (PVR only)
- TSR may not be available during recording. Wait until recording is finished.
- Delete unnecessary programmes and make space for new recording.

15. Cannot playback. (PVR only)
- To playback the recorded file of a scrambled channel, use the Smartcard. In case it has been a long time since you last recorded, this may not work. Contact the product distributor.
- The signal during recording may be weak or the hard disk too full.

16. Cannot change channels while recording. (PVR only)
- Certain channels may not be changed due to restriction of the tuner or connection type.

Appendix

Error Message

Error message	Possible causes	What to do
No or bad signal [Satellite]	The satellite dish is not pointing at the satellite.	Adjust dish alignment.
	Signal is too weak.	Increase the LNB voltage or connect a signal amplifier.
	Satellite dish is too small.	Change to a larger dish.
	Problem with LNB.	Change the LNB.
	Wrong antenna setting.	Set the antenna correctly.
No or bad signal [Cable]	The cable is not connected.	Make sure the cable is connected correctly.
	The cable may be damaged or defective.	Exchange the cable.
	The channel is not broadcasting.	Exchange the cable.
No or bad signal [Terrestrial]	The aerial is not pointing properly.	Adjust aerial. Check the cable from the aerial. If you cannot resolve the problem, you may need to have your aerial and installation tested by a professional.
The channel is scrambled or not available.	The channel has a signal, but no audio or video.	Confirm if the channel is currently on air.
	The channel has been deleted by the broadcasting company.	Check if the channel is currently on air
	The channel is for data broadcasting.	Remove the channel from the channel list and check for new transponder details.
The audio is not available.	The channel has a video signal, but no audio.	Press the audio button to confirm that the channel has audio options.
No access	No access	Make sure you are subscribed to the channel.
	No authorization.	If the product has been turned off for a long time (standby or power off), please wait for authorization. It may take up to 60 minutes.
No card inserted.	Smartcard is not inserted.	Insert Smartcard.

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Error message	Possible causes	What to do
Incorrect card	Wrong Smartcard is inserted.	Insert the correct Smartcard.
	Smartcard is not inserted correctly.	Remove the Smartcard and reinsert it.
	Smartcard is damaged.	Contact your Smartcard retailer or channel broadcaster for a Smartcard replacement.
CI-Module not installed.	CI-Module is not inserted.	Insert CI-Module.
	CI-Module is not inserted correctly.	Remove the CI-Module and reinsert it.
	CI-Module is not recognized.	Insert a different CI-Module to check if your existing module is working.
Invalid CI-Module	Wrong CI-Module.	Insert the correct CI-Module.
	CI-Module is damaged.	Replace the CI-Module.
Short LNB [Satellite]	LNB cable is short.	Replace LNB cable.
	LNB is internally short.	Replace LNB.
	Alien substance is inserted in the LNB IN port. The port may be damaged.	Remove the alien substance and contact the local service centre in case damaged has occurred.

Appendix

Glossary

CVBS (Composite Video Baseband Signal)
A technology for transmitting video signals via a cable. Mixes luminance (brightness) and the chrominance (colour) signals together.

DiSEqC (Digital Satellite Equipment Control)
A DiSEqC compatible receiver relies on a switching box which detects the 22kHz tone pulsing rapidly on and off. In this way, a specially designed receiver can control numerous LNBs through a DiSEqC switching box.

Dolby Digital
An encoding system that digitally compresses up to 5.1 discrete channels of audio (left front, centre, right front, left surround, right surround) into a single Bitstream. A low frequency effect (LFE) channel is included providing the sound needed for special effects.

DVB (Digital Video Broadcasting)
Set of standards that define digital broadcasts using satellite, cable or terrestrial systems.

EPG (Electronic Programme Guide)
An electronic equivalent to a printed television listings magazine; it is an application used with digital set-top boxes and digital television sets to list current and scheduled programs that are or will be available on each channel, including a short summary or commentary for each program. The information supplied in the EPG is sent and updated by the channel broadcaster.

FEC (Forward Error Correction)
A technique for error control of data transmission.
Frequency
The property of a signal measured in cycles per second (=Hz).

FTA (Free- To-Air)
An unscrambled broadcaster allowing customers to view channels or services without paying any subscription.

HDD (Hard Disk Drive)
The primary computer storage medium, which is made of one or more aluminum or glass platters, coated with a ferromagnetic material.

Hi-Fi (High Fidelity)
The characteristics of audio devices that can play back all the audio frequencies a person can detect, which is the range of 16Hz-20KHz. Sometimes it is used to indicate good quality of audio devices such as stereo tape recorders.

LNB (Low Noise Block)
A device that is mounted on an arm facing your satellite dish, focusing on satellite signals. A LNB converts signals received from satellite to a lower frequency and sends them to a satellite receiver via coaxial cable.

NVOD (Near Video On Demand)
A technology that allows customers to view the start of popular programmes or films within a short period from the time they make their selection. This is possible as the broadcaster sends multiple copies with staggered start times.

OSD (On Screen Display)
OSD displays the basic information necessary for the users to configure monitor or TV settings. OSD information may include brightness, contrast, tuning, RGB adjustment, and screen size and position.

OTA (Over the Air)
A standard for the transmission of software for equipment, through a broadcast system. Manufacturers reserve the right for deciding the release of the software for their products.

PID (Packet Identifier)
A set of numbers identifying stream packets contained within a single data stream.

PIP (Picture In Picture)
A function that allows you to display two different TV channels (or TV inputs) on a single screen.

Appendix

Polarisation
The direction of the electrical and magnetic fields of a signal. Satellites use both vertical and horizontal polarisation. Means that a frequency can be used twice.

PVR (Personal Video Recorder)
Video recorder that can record and playback programmes directly using the embedded hard disk drive(s).

QPSK (Quaternary Phase Shift Keying)
Digital modulation technique in which the carrier phase can have one of four possible values.

RF (Radio Frequency)
Television signals are modulated onto RF signals and are then demodulated by your television's or STB's tuner.

RF Modulator
Enables you to output the receiver's digital signals to a TVs RF (Aerial) input, allowing you to connect the receiver to a TV set without a SCART connection.

RGB (Red – Green – Blue)
A technology for transmitting video signals via a cable. RGB is a system to represent red, green, and blue colours on a TV or monitor display. Red, green, and blue can be combined in various proportions to obtain any colour.

RS-232C
A connection to allow you to connect to a PC to update receiver's software.

SCART
A 21-pin connector standard to connect two pieces of Audio-Visual equipment such as a TV and a VCR. Each device will have a 21-pin female connection; a cable with male connection at both ends is used for connecting the devices.

Smartcard
A credit card sized card that contains updateable chip memory. It is used for accessing Pay TV (encrypted) channel or services when inserted into an appropriate receiver.

S/PDIF (Sony/Philips Digital Interface format)
A standard format for the transfer of digital audio signals. It allows the transfer of digital audio between two devices without any conversion to and from analogue, which could degrade the signal quality.

S-Video (Super-Video)
Sometimes referred to as Y/C video; a technology for transmitting video signals via a cable. It is a video signal transmission in which the luminance (brightness) and the chrominance (colour) signals are transmitted separately to achieve superior picture clarity.

Transponder
A satellite is divided up in parts called transponders. A transponder is one distribution section of the satellite. Each transponder can be used for distribution of several channels or services.

Trick-Play
Pause, Fast Forward/Fast Rewind, Slow Motion, Instant Replay, Commercial Skip, Repeat A-B.

TSR (Time Shifted Recording)
A function that records the present programme temporarily to support trick-play.

Appendix

Remote Control Code List

Using the Universal Remote Control

1. Select the mode(PVR, TV, DVD, AUDIO) you want to set by pressing the corresponding button on the remote control. The button will blink once.
2. Keep pressing the button for 3 seconds until the button lights on.
3. Enter the 4-digit code. Every time a number is entered, the button will blink. When the fourth digit is entered, the button will blink twice.
4. If a valid 4-digit code is entered, the product will power off.
5. Press the **OK** button and the mode button will blink three times. The setup is complete.
6. If the product does not power off, repeat the instruction from 3 to 5.

Note:
- When no code is entered for one minute the universal setting mode will switch to normal mode.
- Try several setting codes and select the code that has the most functions.

Remote Control Function List

The keys on the remote control function as in the list below.

Note: Some keys may not function depending on the product.

Button	TV	DVD	AUDIO
STANDBY	POWER	POWER	POWER
	MUTE	MUTE	MUTE
PVR			
TV			
DVD			
AUDIO			
1	DIGIT 1	1	INPUT 1
2	DIGIT 2	2	INPUT 2
3	DIGIT 3	3	INPUT 3
4	DIGIT 4	4	INPUT 4
5	DIGIT 5	5	INPUT 5
6	DIGIT 6	6	INPUT 6
7	DIGIT 7	7	INPUT 7
8	DIGIT 8	8	INPUT 8
9	DIGIT 9	9	INPUT 9
0	DIGIT 0, 11	0	INPUT 0
TV Portal			
MENU	MENU	MENU	MENU/MODE

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Button	TV	DVD	AUDIO
▶	TEXT EXPAND	PLAY	PLAY
⏸	TEXT HOLD	PAUSE	PAUSE
■	PIP INPUT	STOP	STOP
●	PIP MOVE	RECORD, OPEN CLOSE	RECORD
◀◀	PIP OFF	REWIND, SEARCH REVERSE; SCAN	DVD SEARCH REW, CD SEARCH REW, REW
▶▶	PIP	FAST FORWARD, SEARCH FORWARD; SCAN	FAST FORWARD, DVD SEARCH REW, CD SEARCH REW, REW
⏮	TEXT MIX	SKIP -, TRACK -, CHAPTER -	DVD SKIP -, CD SKIP -, SKIP -
⏭	TEXT OFF, TV	SKIP, TRACK +, CHAPTER +	DVD SKIP+, CD SKIP +, SKIP +
RED	RED	RED	RED
GREEN	GREEN	GREEN	GREEN
YELLOW	YELLOW	YELLOW	YELLOW
BLUE	BLUE	PROGRAMME	BLUE
MEDIA			
GUIDE	GUIDE	GUIDE	DSP MODE
OK	OK	OK	OK
UP	UP	UP	UP
LEFT	LEFT	LEFT	LEFT
RIGHT	RIGHT	RIGHT	RIGHT
DOWN	DOWN	DOWN	DOWN
EXIT	EXIT	EXIT, RETIRN	EXIT
BACK	LAST, RECALL; PP; LAST CHANNEL	CLEAR	REPEAT
VOL+	VOL+	VOL+	VOL+
VOL-	VOL-	VOL-	VOL-
LIST			
P+	P+	P+	P+
P-	P-	P-	P-
TEXT			
		AUDIO, LANGUAGE	SURROUND
	SUBTITLE, LANGUAGE; CC	SUBTITLE	

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Button	TV	DVD	AUDIO
TV/RADIO	TV/DTV ATV/DTV; D/A; DTV/TV; DTV; DIGITIAL	HDD, DVD/HDD	BAND
OPT+			
	TEXT SUBPAGE TEXT TIME		RANDOM
	TEXT INDEX	TITLE	
	TEXT POSITION TEXT CANCEL; TEXT UPDATE	SLOW; STEP	
SOURCE	SOURCE, AV, 55INPUT; TV/AV	SOURCE, TV/DVD, TV/DISK	SOURCE, FUNCTION
SLEEP	SLEEP	SLEEP	SLEEP
V-FORMAT	TEXT SIZE; TEXT EXPAND; FTB		
ZOOM	WIDE, FORMAT, 16:9, ASPECT; ZOOM	ZOOM	

2. TV Code List

Brand	Code
A.R. Systems	0556, 0037, 0455, 0352, 0374
Accent	0037
Acer	1339, 1403, 1509
Acoustic Solutions	1149, 1523, 1545, 1667, 1727, 1865, 2055
Acura	0009
ADL	1217
Admiral	0264, 0087, 0093, 0163
Advent	0876, 1613
Adyson	0216, 0217
AEG	1163, 1324, 1556, 2096
Agashi	0264, 0216, 0217
AGB	0516
Agef	0087
Aiko	0037, 0361, 0264, 0433, 0009, 0035, 0072, 0191,0216, 0217, 0371
Aim	0037, 0805
Airis	1531, 1833, 2050
Aiwa	0701, 0705, 1916
Akai	0556, 0037, 0548, 0714, 0715, 0606, 0361, 0264,0433, 0729, 1259, 1413, 0648, 0631, 2021, 0602,2025, 2096, 0516, 0480, 0473, 0371, 0217, 0216,0208, 0191, 0163, 0072, 0035, 0009, 0745, 1537
Akiba	0037, 0218, 0455, 0282
Akito	0037, 0272
Akura	0037, 0714, 0668, 1037, 0264, 0218, 0009, 0171,0282, 0412, 1498, 1556, 1687, 1982
Alaron	0216
Alba	0037, 0714, 0668, 1037, 0487, 0370, 0218, 0036,0587, 2050, 1997, 1935, 1731, 0551, 0480, 0443,0418, 0371, 0355, 0247, 0216, 0163, 0009
AlfaView	1206
All-Tel	0865, 1269
Allorgan	0206, 0217
Allstar	0037
Amitech	0655, 1281
Amoi	1529
Amplivision	0370, 0217, 0320

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Amstrad	0037, 1037, 0264, 0218, 0433, 0009, 0163, 0171,0362, 0371, 0412, 0516, 0648, 1820, 1890, 1982
Anam	0037, 0009
Anam National	0037, 0650
Andersson	1149, 1163
Anglo	0264, 0009
Anitech	0037, 0264, 0009, 0282
Ansonic	0037, 0668, 0370, 0009, 0104, 0163, 0259, 0292,0374, 0411, 1437
AOC	0625, 1365, 1588
Apollo	0473
Apro	1846
Arc En Ciel	0109
Arcam	0216, 0217
Ardem	0037, 0714
Arena	0037
Aristona	0556, 0037
ART	1037
Arthur Martin	0163
ASA	0070, 0087, 0104, 0105, 0346
Asberg	0037
Asora	0009
Asuka	0264, 0218, 0216, 0217, 0282
Atec	1606, 1728
Atlantic	0037, 0206, 0216, 0259, 0320
Atori	0009
Auchan	0163
Audiosonic	0037, 0714, 0486, 0715, 0264, 0370, 0218, 0009,0109, 0217, 0374, 0865, 1308, 1800, 2050
Audioton	0486, 0264, 0370, 0217
Audiovox	0451
Aumark	0060
Autovox	0087, 0206, 0217, 0247, 0349, 0544
AVC	2044
Avious	1634
Awa	0606, 0036, 0108, 0009, 0011, 0217, 0451, 1376
Axxent	0009
Baier	0876

Baird	0072, 0073, 0109, 0193, 0208, 0217, 0343, 1196
Bang & Olufsen	0087, 0565, 0619, 0620
Barco	0163
Basic Line	0556, 0037, 0668, 1037, 0218, 0455, 0009, 0163,0217, 0282, 0339, 0374, 1163
Bastide	0217
Bauer	0805, 1615
Baur	0037, 0195, 0361, 0191, 0349, 0512, 0535, 0544,0554
Bazin	0217
Beaumark	0178
Beko	0037, 0714, 0486, 0715, 0606, 0370, 0418, 0808,1652, 1800
Belson	0698, 0894, 1191
Belstar	1037
BenQ	1212, 1562, 1574
Bensten	1326, 1890, 1893
Beon	0037, 0418
Berthen	0668
Best	0370
Bestar	0037, 0370, 0374
Bestar-Daewoo	0374
Binatone	0217
Black Diamond	1909, 1037, 0614, 1163
Black Star	0247
Blackway	0218, 0282
Blaupunkt	0195, 0036, 0455, 0170, 0191, 0200, 0327, 0535,0554
Blue Media	1606, 1728
Blue Sky	0556, 0037, 0714, 0668, 1037, 0715, 0487, 0218,0455, 0499, 0624, 0282, 1191, 1243, 1314, 1363,1521, 1652, 1709, 1916
Blue Star	0282
BlueH	1745
Boca	1652
Boman	1324
Bondstec	0247
Boots	0009, 0217, 0272
Bork	1363

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Bosch	0320
Boxlight	0736
BPL	0037, 0208, 0282, 0896
Brandt	0625, 0714, 0560, 0109, 0287, 0335
Brimax	1709
Brinkmann	0037, 0668, 0486, 0418, 0519
Brionvega	0037, 0087, 0362
Britannia	0216, 0217
Brother	0264
Bruns	0087
BSR	0163
BTC	0218
Bush	0556, 0037, 0714, 0668, 1037, 0698, 0487, 0361,0264, 0218, 0036, 0587, 1687, 1682, 1667, 1652,1645, 1634, 1556, 1731, 1869, 1870, 1871, 1900,1954, 1982, 2050, 2053, 2055, 2056, 0009, 0208,0217, 0272, 0282, 0349, 0355, 0371, 0374, 0519,0614, 0660, 0661, 0778, 1149, 1166, 1243, 1259,1308
Canton	0218
Capsonic	0264
Carad	0668, 1037, 0610
Carena	0037, 0455
Carrefour	0037, 0036, 0070
Carver	0170
Cascade	0037, 0009
Casio	0037
Cat	1682, 2155
Cathay	0037, 1727
CCE	0037
cello	1770, 1820, 1844, 1845, 1846
Centrum	1037
Centurion	0037
Century	0087, 0247
CGE	0370, 0074, 0163, 0247, 0418
Changhong	0821
Chimei	2052, 1837
Cimline	0218, 0009
Cineral	0451
Cinex	0648, 1166, 1556

Citizen	0060
City	0009
Clarivox	0037, 0070, 0418
Classic	0499
Clatronic	0037, 0714, 0264, 0370, 0218, 0009, 0217, 0247,0320, 0371, 1324
Clayton	1037
CMS	0216
CMS Hightec	0217
Concorde	0009
Condor	0037, 0264, 0370, 0009, 0216, 0247, 0282, 0320,0411, 0418
Conia	0820, 0894, 1498, 1687
Conrac	0808
Contec	0037, 0036, 0009, 0216
Continental Edison	0487, 0109, 0287
Cosmel	0037, 0009
Crosley	0074, 0087, 0163, 0247
Crown	0037, 0714, 0668, 1037, 0486, 0715, 0487, 0606,0712, 0370, 1652, 0672, 0418, 0412, 0339, 0208,0009
Crown Mustang	0672
CS Electronics	0218, 0216, 0247
CTC	0247
CTX	1756
Curtis Mathes	0060, 0093, 0145, 0166, 0451
Cybertron	0218
Cytronix	1298
D-Vision	0556, 0037, 1982
Daewoo	0556, 0037, 0634, 1909, 0218, 1902, 1812, 1612,1598, 1376, 1307, 0880, 0876, 0865, 0778, 0661,0624, 0499, 0451, 0374, 0217, 0216, 0009
Dainichi	0218, 0216
Daitsu	1267
Dansai	0037, 0036, 0009, 0035, 0208, 0216, 0217
Dansette	0412
Dantax	0714, 1037, 0486, 0715, 0370, 1652, 1916, 1981
Datsura	0208
Davis	0736

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Dawa	0037
Daytek	1207, 1374, 1376
Dayton	0009, 1207, 1374
Daytron	0037, 0009, 0374
De Graaf	0548, 0044, 0163, 0208
DEC	1326
Decca	0037, 0072, 0217, 0272, 0516, 0621
Dell	1264, 1403
Denko	0264
Denon	0145
Denver	0037, 0587, 1189, 1324, 1634, 1820, 1988, 2050,2096
DER	0193
Desmet	0037, 0009, 0087, 0320
DGM	1890
Diamant	0037
Diamond	0825
DiBoss	1474
Digatron	0037
Digihome	1149, 1667
Digiline	0037, 0668, 0105
Digimate	0890
Digital Device	1606
Digitek	1521, 1709
Digitrex	2056
Digix Media	0880
Dixi	0037, 0009, 0087, 0217, 0247
DL	0891, 1326
DMTech	1338, 1898, 1964, 1994, 2001
Domeos	0668
Domland	0394
Dream Vision	1704
DTS	0009
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Sunstar	0037, 0264, 0009, 0371
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Sunwood	0037
Superla	0216, 0217, 0516
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Sutron	0009
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Sytong	0216
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Univox	0037, 0087, 0163
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Blue Sky	0624, 1916
Daewoo	1909, 0624
Dantax	1916
Emerson	1909, 0624
Ferguson	0625, 0073
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GoldStar	0037
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Grundig	1954
Matsui	1935
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Ansonic	0831, 0759, 1351, 1493
Apex Digital	0672, 1004, 1254, 1480
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ASCOMTEC	1923
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Audiola	1620, 2335
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Axion	0730
Basic Line	0713, 1994
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Biostek	1601
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Blue Sky	0695, 0651, 0790, 0672, 0713, 0843
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Bose	2023
Brainwave	0770, 1115
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Bush	0730, 0831, 0672, 0713, 0717, 0723, 1140, 1351,1419, 1436, 1530, 1695, 1832, 2256, 2261
Cambridge Audio	0751
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Centrum	0675, 0713, 0789, 1227, 1923, 1994
CGV	0751, 1115
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Denver	0672, 0788, 0898, 1321, 1420, 1493, 1601, 1923,2256
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Appendix

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   c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
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How to Apply These Terms to Your New Libraries

Appendix

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